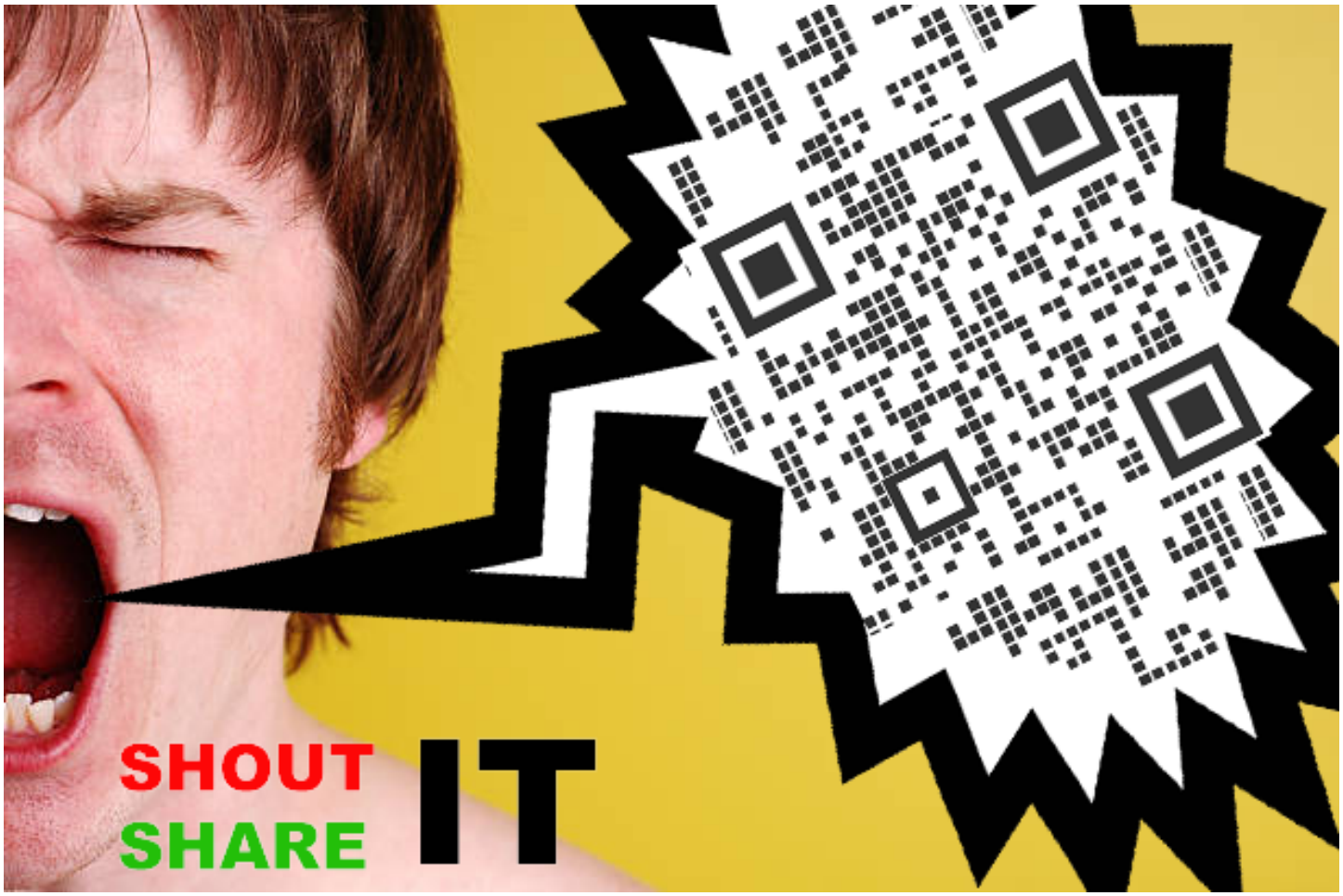
# The WhatsApp India Story

## Inside the Digital *Maya* Sphere

Sunetra Sen Narayan and Shalini Narayanan

ROUTLEDGE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"This book tells many stories that together provide an overview of the phenomenal penetration of WhatsApp into all walks of life in India – from personal messaging to professional communications, from politics to business, from prosocial uses to antisocial abuses – providing rich fodder for research and media literacy campaigns".

**—S. Shyam Sundar,** *James P. Jimirro Professor of Media Effects, Penn State University, USA*

"This book is an important effort to holistically explore the influence of WhatsApp in India. The content involves issues of interest for both general and academic audiences and is presented in a lucid manner. The authors explore the use of WhatsApp in a wide variety of real-life contexts which adds to the richness of the content and relevance of the book for non-academic audiences".

**—Dr. Jatin Srivastava,** *Professor and Director, Institute for International Journalism at Ohio University, USA*

"This book offers a systematically researched deep dive into the social media phenomenon that is changing generations across geographical and class barriers with wildfire speed, challenging, empowering and threatening the social fabric, keeping policymakers and administrators struggling with new-age puzzles to solve".

**—Madhavan Narayanan,** *Senior Editor, Technology & Political Economy Analyst*

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# THE WHATSAPP INDIA STORY

WhatsApp is used by over half a billion people in India today in all fields – in business, corporate and informal sectors, in government, for education and among friends, families and acquaintances. This book critically explores the social messaging app's rapid expansion in India and its growing influence and looks at whether, as a form of horizontal communication, it poses a challenge to more traditional structures of communication.

The book examines WhatsApp's spread in the personal and professional lives of Indians and the myriad ways in which people in India are using the app in social and business interactions, including among people living with disabilities. Using case studies, interviews, surveys and in-depth research, it analyses key aspects of WhatsApp's massive popularity and its impact on how people communicate. It also explores its impact on the psycho-social dynamics in India, including the dissemination of fake news and politically motivated content, and the consequent need for media regulation in the country.

One of the first books to analyse the pervasiveness of WhatsApp and social media apps in different areas of Indian society, this book will be of interest to scholars and students of media studies, communication studies, digital media, cultural studies, cyberculture studies, sociology and social policy and media law.

**Sunetra Sen Narayan** is currently Professor at the Indian Institute of Mass Communications, New Delhi. She was awarded a Doctorate degree in Mass Communication from Pennsylvania State University, USA. Her areas of expertise include development, international communications and health and digital media. She is the author of *Globalization and Television: A Study of the Indian Experience 1990–2010* (2014) and the co-editor of *India Connected: Mapping the Impact of New Media* (2016).

**Shalini Narayanan** straddles the worlds of academia and public service with her background as a communications scholar and Indian Information Service (IIS) officer. Since she took voluntary retirement from service in 2013, she has been engaged in academic and literary writing, training, teaching, and learning. She has two books, several academic papers and a collection of over 500 micro-stories to her name. She is the co-editor of *India Connected: Mapping the Impact of New Media* (2016).

# THE WHATSAPP INDIA STORY

## Inside the Digital *Maya* Sphere

*Sunetra Sen Narayan and Shalini Narayanan*

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# CONTENTS

*List of Figures* *x*
*Foreword* *xii*
*Acknowledgements* *xv*

1 WhatsAppening India: The Message is the Medium 1

2 Social Messaging: The Theoretical Framework 24

3 Hello WhatsApp: Connecting Friends and Family 60

4 Politics and Elections: The Virtual Battleground 89

5 The Menace of Fake News: Beware the Forward 114

6 Regulatory Challenges: Crime and Punishment 146

7 WhatsApp and Disability: An Enabler? 178

8 Professionals and Messaging: Fatigue or Administrative Ease? 202

9 Doing Business, the Social Messaging Way 225

10 Conclusions: The WhatsApp Way of Life 250

*Appendix* *273*
*Index* *278*

# FIGURES


| | | |
|---|---|---|
| 1.1 | Social Media Use Globally – 2020 | 3 |
| 1.2 | Social Media Platforms in India in 2021 | 6 |
| 1.3 | Growth in Number of WhatsApp Users in India 2013–2021 | 7 |
| 1.4 | Gender Ratio within Categories of Indian Respondents in the Survey | 15 |
| 3.1 | Number of Respondents Location-wise | 62 |
| 3.2 | Category-wise Distribution of Respondents | 62 |
| 3.3 | Overall Gender Ratio of Respondents from India (Foreigners Temporarily in India Not Included) | 63 |
| 3.4 | Gender Ratio within Categories for Indian Respondents | 63 |
| 3.5 | Representing the Geographical Spread of Student Respondents | 64 |
| 3.6 | Gender-wise Distribution of Student Respondents | 64 |
| 3.7 | Screenshot of Unwanted Messaging from Unknown Number | 66 |
| 3.8 | Representing the Geographical Spread of Government-sector Respondents | 70 |
| 3.9 | Gender-wise Distribution of Government-sector Respondents | 71 |
| 3.10 | Representing the Geographical Spread of Teacher Respondents | 72 |
| 3.11 | Gender-wise Distribution of Teacher Respondents | 73 |
| 3.12 | Representing the Geographical Spread of Professional/ Entrepreneur Respondents | 75 |

3.13 Gender-wise Distribution of Professional/Entrepreneur Respondents 76
3.14 Gender Ratio of Armed Forces Personnel Surveyed 79
3.15 Word-cloud Listing Reasons for Using WhatsApp Given by Respondents 83
4.1 Sexist Jokes about Women from West Bengal Circulating on WhatsApp 103
6.1 Cover Story on WhatsApp and Privacy in Leading Magazine *India Today*, October 12, 2020 162
7.1 Focus Group Discussion with Visually Challenged Students 188
7.2 Samuel and Meenu Mani, Founders, Yes We Can 197
8.1 Focus Group Discussion with Employees of a Corporate Firm 211
8.2 A Diagrammatic Representation of Various WhatsApp Groups in Offices 216
9.1 A Self-employed Tailor Using WhatsApp Voice Notes to Deliver Orders to His Customers 229
9.2 A Businesswoman Marketing Sarees via WhatsApp Groups 230
9.3 A Neighbourhood Grocery Store Selling Products via WhatsApp 231
9.4 A Telecom Service Provider Interacting with Customers via a WhatsApp Group 232
10.1 Photo of a Full-page Newspaper Advertisement by WhatsApp in April 2023 263
10.2 Screenshot of a Promotion by WhatsApp on Facebook 264

# FOREWORD

This book provides a wealth of insight into how WhatsApp is influencing the lives of its Indian users. How and why do they value this particular messaging app? WhatsApp, the messaging app owned by Meta, is a leader in multiple markets. In India, in 2023, it is reckoned to have around 546 million users. The notoriety of social media, and specifically messaging apps – how they infiltrate people's lives around the world in ways that are welcomed, condemned or resisted – has led to a proliferation of research. A Google Scholar search for works with WhatsApp in the title between 2020 and 2023 yields 435,000 contributions, 50,500 of which have India as a main or partial focus. Research on the attractions and harms associated with WhatsApp comes from multiple disciplinary perspectives, some with a focus on positive attributes and some with a focus on negative consequences, including the amplification of hate speech, the circulation of propaganda and the harms of disinformation for people's safety, for political processes and for democracy.

In *The WhatsApp India Story: Inside the Digital* Maya *Sphere*, Sunetra Sen Narayan and Shalini Narayanan offer rare insights into how people describe their everyday life experience with this messaging app. Offering a picture of how the use of WhatsApp has developed in India between 2017 and 2023, they approach their study from a holistic perspective through the lens of theories, including imagined communities, the diffusion of innovations, uses and gratifications research and more – and they succeed in encompassing insights from the disciplines of sociology, psychology, law and economics and the media and communications field. Their qualitative story draws on a small "n" survey sample and interviews which are complemented by extensive previous research.

All this is woven together creatively to provide a balanced account of positive and negative experiences with the app, experiences akin to the yogic tradition of *Maya*, where reality is incompletely knowable and uncertain as it often seems to be in the virtual spaces of social media. WhatsApp is described, for instance, as being associated with liking and attraction, with breakdowns in hierarchical social relations, but also with complicity in the creation of a "sometimes deadly web". Readers will benefit from insight into the use of WhatsApp for personal communication and its implications for social relations, its role in political communications and its contribution to the spread of disinformation with both online and offline consequences.

The authors take care not to infer direct causal relations between the use of WhatsApp and its consequences. They avoid both a technology and a socially or culturally deterministic account of the role of WhatsApp in India. Readers interested in how people living with disabilities appropriate the app to improve their lives will find numerous interesting observations. And, the accounts of the pros and cons of evermore intensive use of this messaging app by professionals in their working lives and in support of the operations of small and large businesses are also intriguing.

The analysis of WhatsApp users' perceptions of the role of messaging in their everyday lives is contextualised by an account of the complexities of regulating social media in India. In the wake of concerns about commercial monetisation of data and the self-regulatory practices of digital platforms, the narrative in this book pays attention to the internal and external structures of power that condition how this messaging app is experienced. Like other ostensibly liberal democratic governments, WhatsApp's use of encryption to protect messages is increasingly seen by the Indian government as an anathema and as a challenge to its capacity to keep citizens safe and to protect children from exposure to harmful content.

Sunetra Sen Narayan and Shalini Narayanan are careful to acknowledge that the way the governance of WhatsApp and other social media in India will shape the role of social media platforms is uncertain, but they do hint at potential future scenarios – in one of these, WhatsApp evolves into a social credit scoring system that discriminates among users; in another, any remnants of personal privacy protection are set aside by the Indian courts in the interests of national security. They also note that current regulatory approaches tilt towards making the users responsible for protecting themselves from invasions of their personal privacy, from disinformation and from state surveillance. In India, where formal literacy is below 78% and digital divides are ever present, they do not see media literacy as an answer to the need for citizen protection. Instead, they call attention to the need to reach an agreement about who is, or should be, liable for the content of messages and who should be responsible for crimes linked to these messages. In this regard, recent moves by the Indian state to gain greater control

over users' messages are highlighted as heightening the risk that the state will become more overzealous in seeking to control messaging, resulting in infringements on freedom of speech and privacy invasions.

A Draft Digital Personal Data Protection Bill of 2022 is under consideration by the Indian government at the time of writing. This Bill is being criticised in some quarters for conferring authority on the government to exempt state agencies from some provisions potentially leading to abuses of its privileged access to data. The government's role in controlling online information in response to protest movements in recent years and efforts to censor political information is discussed. If passed, the new Bill could strengthen its powers by requiring that WhatsApp users be traceable and identifiable, which is inconsistent with the app's encryption. Unsurprisingly, civil liberty groups and digital platforms, like WhatsApp, are resisting attempts by the state to engage in greater surveillance. In this context, this book gives us a valuable case study of the role of WhatsApp as an agent of glocalisation. Sunetra Sen Narayan and Shalini Narayanan observe that "the digital future in India may see it positioning itself between a Chinese style firewall and a Western model of the Internet", but they also insist that "the way things eventually pan out is unclear at the time of writing".

Robin Mansell, Professor Emerita
*Department of Media and Communications,*
*London School of Economics and Political Science*
*London, August 2023*

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Sunetra Sen Narayan and Shalini Narayanan
*New Delhi*
*July 20, 2023*

# 1

# WHATSAPPENING INDIA

## The Message is the Medium

### Introduction

*It is mid-2023, Suchitra, 35, is trying to complete an urgent project for her company. It is 9 p.m. and she only has an hour before she has to submit it. But her boss keeps messaging her on WhatsApp regarding fresh changes which need to be included. It is 9:10 p.m. and she glances at her phone. Her boss has sent another text which she cannot afford to ignore. She clicks on her WhatsApp text box, and finds she has 86 unread messages received in the past two hours. She tries to avoid looking at them but one from her friends' group reminds her she was supposed to meet them on Zoom for a virtual meeting at 10 p.m. Her husband asks her when she is coming for dinner and Binny, her daughter, also walks in, rubbing her eyes sleepily. She apologises and tells her husband to look after Binny and have dinner. She hurriedly looks at the text from her boss and finds she needs to make some changes to the table she was constructing. While looking at the text, she gets two pop-up notifications from her friends. It will take just a minute to respond, she thinks and types out her apologies. In the meantime, the family group is buzzing with texts but she chooses to ignore them – must be some forwarded messages or congratulations or birthday messages, she thinks. Those can wait. But her office group pop-up notification says offices will be closed tomorrow! She needs to look at that. Eyes shifting from one screen to the other (laptop to mobile and back), she somehow completes her assignment and flops down on the bed. But that notification dot from WhatsApp keeps*

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> *blinking, till she surrenders and picks up her mobile to catch up with over 100 messages*. (Suchitra (name changed), personal communication, 21.8.2021)

The Covid-19 pandemic wreaked havoc across the world from early 2020. Just when one relaxed one's guard, new strains popped up and people scurried back indoors. It was a time of ennui, with social distancing and conversation-impeding masks in place. In a post-Covid-19 world from 2022 onwards, some of the trends of usage of digital media observed during the pandemic still continue, while others have seen a slowing down or reversal.

Luckily, the internet is three decades old and its Web 2.0 version makes for a rich interactive world where conversations can flow freely, without the fear of infections. Facebook, Twitter, LinkedIn and WhatsApp usage jumped up dramatically during the lockdown imposed in India in 2020. WhatsApp usage went up by as much as 40% during that time ("WhatsApp Sees", 2020). WhatsApp has become near ubiquitous for smartphone users in India in early 2021. It has become closely intertwined with all facets of our lives, both work and play. One indicator of the pervasiveness of WhatsApp is that references to WhatsApp pepper popular culture today. By May 2021, WhatsApp groups across India were awash with desperate appeals for oxygen cylinders, Remdesivir and information about availability of hospital beds. There was a fresh urgency in the forwarded messages as Covid-19 was cresting its second wave across India, overwhelming an already severely burdened healthcare system.

In a post-Covid-19 world, the subscriber base of WhatsApp in India is still growing at a healthy rate. It is forecast to touch 663 million in 2023 and a massive 796 million users approximately in India in 2025 (Degenhard, 2021). These estimates indicate that India is the country with the maximum number of WhatsApp users in the world.

## WhatsApp in the World

The world is digital today. The Covid-19 pandemic, and its accompanying necessity of social distance has meant that digitalisation has speeded up in 2020 and beyond. The world over, people had been forced to work from home, educate themselves from home and buy necessities and entertain themselves via online means. Against this backdrop, usage of social media had also shot up. These include the big global platforms such as Facebook, Instagram, YouTube and Twitter. The subgroup of social messaging applications such as WhatsApp, Facebook Messenger, Signal and Telegram have also registered increased usage across the world in the last few years.

WhatsApp is a play on "What's up?" or as Bugs Bunny the cartoon rabbit reminds us in a cheeky irreverent tone, "What's up, Doc?" WhatsApp, like a digital warren, is a place where you can bolt down the rabbit holes of WhatsApp groups to find love or hate, work or play, for sickness or for health, information or education. It has something for everyone, from the preteen to the nonagenarian. This virtual terrain has many intersecting landscapes, where people spend time immersed in text, voice and video, a parallel world cross cutting the personal and public spheres to form a world of illusion or *maya*[1] that the authors would like to call the *Maya* sphere.

This social messaging application has taken large parts of the world by storm, with many countries like India and Brazil enmeshed in its sometimes-deadly web. WhatsApp is essentially a freeware or application (app) used for cross-platform communication in text, voice and video. Brian Acton and Jan Koum, former employees of Yahoo were the founders of WhatsApp in 2009. The app was developed by coder Igor Solomennikov, initially to update users with status updates. It quickly morphed into an instant messaging service. This was a novel app as apart from Blackberry's Blackberry Messenger (BBM), nothing else existed at that time. Multimedia messaging was also added on later that year, and ever since, the app never looked back.

The burgeoning popularity of the app led to another milestone; it was acquired by Facebook for a record $19 billion in 2014, yet remained advertisement free (Iqbal, 2021). The social messaging app claims to utilise end-to-end encryption, yet another feature adding to its popularity. Used in over 180 countries, WhatsApp is used *daily* by more than half the global millennial population (54%) and 36% of baby boomers, as reported in March 2021 (Julija, 2021). It is the number one messaging platform in the world

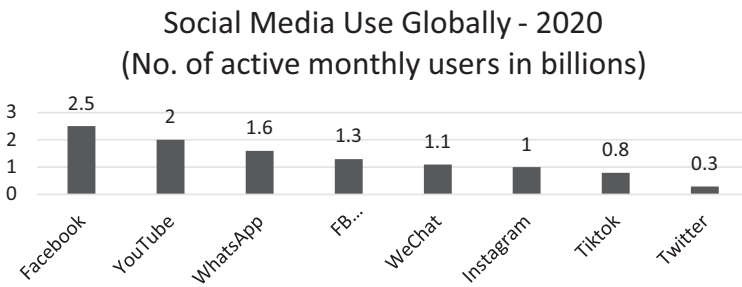


**FIGURE 1.1** Social Media Use Globally – 2020.

*Source:* Authors' graph. Graph based on numbers of monthly active users of the social media platforms accessed January 21, 2021, from wearesocial.com: https://wearesocial.com/uk/blog/2020/01/digital-2020-3-8-billion-people-use-social-media/ accessed January 21, 2021

with Facebook Messenger, WeChat, QQ and Telegram following it in popularity. Every day there are 100 billion messages being sent out on WhatsApp globally. The app however is not as popular in the United States with just 20% penetration and is more prevalent in Africa and Latin America. Kenya with 97% penetration tops the countries where WhatsApp is widespread. Close competitors are South Africa at 96%, Nigeria at 95% and Argentina at 93%. In comparison, WhatsApp penetration in India is only around 64% (Iqbal, 2021). One reason for its prevalence in the Global South could be the practice of "zero rating" or telecom companies giving free but exclusive access to some social media platforms such as Facebook and WhatsApp in countries with poor internet connectivity. The same tactic was tried in India too with the proposal named *Free Basics*. But due to fierce opposition to the move, it was dropped.

Some milestone statistics about WhatsApp which show the extensive use of the app are mentioned here. In early 2020, when the world was first battling the Covid-19 pandemic, 15 billion minutes were spent on WhatsApp calls *every day* (Julijo, 2021); WhatsApp was downloaded 42 million times in January 2021 alone (Dean, 2021); in 40% of divorce cases in Italy, WhatsApp was cited as evidence (Julijo, 2021). China has blocked WhatsApp, as it has other apps from other countries. Some countries have partially blocked WhatsApp in that users can send text messages but they cannot make voice or video calls through the app. This is due to their ban on Voice Over Internet Protocol (VOIP) services. Among such countries are Cuba, Syria, Iran, the UAE, North Korea and Qatar (Lin, 2022).

In Brazil, in 2022, there were reportedly over 147 million users of WhatsApp with 96% of them being active users of the app (Hutchison, 2023). The app has been blamed for the spread of mal-information during the presidential election in 2018 (Isaac & Roose, 2018). In Mexico, the number of WhatsApp users is forecast to rise every year between 2019 and 2028. The forecast for 2023 is for the number of users in Mexico to be around 90 million (Ceci, 2021). In a study on "How do Mexicans use WhatsApp" conducted in 2019 by the consultancy Communicacion Politico Aplicada, it was found that over 17% of Mexicans using the app were spending more than six hours on average on it ("This Is How", 2019). Nearly 60% of the users were women and the remaining were men, while most of the users were in the age group 21–30 years. Nearly 90% of the usage was for sharing images. In Kenya, a recent survey shows that "WhatsApp, Facebook and YouTube have remained the most popular social media platforms". The survey, "The Kenyan Social Media Landscape: Trends and Emerging Narratives 2020", said that WhatsApp usage went up marginally in 2020 (Wainainah, 2020). In Malaysia, a study revealed that WhatsApp was being widely used in political campaigning ("WhatsApp: The Widespread Use", n.d.). These global trends also illuminate some aspects of WhatsApp use in India.

## WhatsApp in India

In line with its global growth, this application has spread across the length and breadth of India, bypassing geographies, income, age and gender barriers. Like the cell phone before it, WhatsApp has furthered the trend of breaking down traditional hierarchies. It has blurred the divisions between work life and personal life, day and night like never before. It has been instrumental in bridging the urban and rural gaps, with the WhatsApp group taking over from real group interactions in many cases. The seclusion forced on the world due to the global Covid-19 pandemic saw many people joining WhatsApp, spending more time on it and reviving dormant groups they already belonged to as virtual interactions took the place of real ones. In fact, Nikhil Pahwa (2018, Interview with the authors), digital rights activist and *Medianama* founder, believes that platforms like WhatsApp are "an extension of reality". He says, "messaging is a high engagement activity" and a user would prefer to have all his activities centred around a messaging platform, rather than opening another app. In his view, "Messaging is almost like a core service, and they can keep adding more and more services and one would never leave the platform". Echoing that thought, acclaimed novelist Anita Nair wrote in *The Hindu* newspaper in December 2019 that "WhatsApp taught us to make our phones into an extension of ourselves". In the same article, "WhatsApp, India? How an App Insinuated Itself into Our Lives", she said "this was a parallel universe you retreated into every few minutes", and possibly secretly. With the app she said, "relationship management had hit a new milestone". It helped decimate hierarchies, though of course, according to her, it finally became a "Petri dish where bigots emerged and spat venom" (Nair, 2019).

WhatsApp is the child of a larger family of social media. Though Facebook, Twitter, LinkedIn etc. pre-date WhatsApp, the kind of intimacy and ease of conversation offered by messaging applications such as WhatsApp, Telegram, Signal, Facebook Messaging etc. cannot be replicated by other social media. Facebook was launched in 2004, while WhatsApp was first incorporated in 2009; but it was only after Facebook acquired WhatsApp that it really saw rapid growth. In India, the number of monthly active WhatsApp users was pegged at 200 million in 2017 (Basuroy, 2021). But by July 2019, its user base had doubled to 400 million in India (Banerjee, 2020). As of February 2021, estimates suggest that the number of WhatsApp users in India is 530 million ("Government Notifies", 2021). The other messaging app that has such a massive user base globally is WeChat, which is being used for everything – personal chatting, business, payments, document exchange etc. but it is mostly limited to China. By the end of March 2020, WeChat users numbered 1.17 billion worldwide, of which nearly 1 billion were registered users living in China (Stancheva, 2023).

WhatsApp has a wider spread across the globe and is the number one messaging app with 2 billion users as of February 2021 and India is its largest market worldwide (Banerjee, 2020). In India, even as the number of internet users in the period April 2019 to January 2020 went up by 130 million, or 48%; the percentage of people accessing social media through the phone rose to 100%. This in turn pushed the percentage of people using messaging apps up to 85%. This was marginally higher than social networking sites being accessed via the phone, which stood at 84%. As of January 2020, WhatsApp was the top-ranked among mobile apps, as rated by active users, followed by Facebook, Truecaller and then Facebook Messenger in India. However, if ranked according to the number of downloads, TikTok was number one, followed by Facebook, and WhatsApp stood number 4 on the list (Kemp, 2020).

The rising number of smartphones in India, driven by the supply of cheap phones from China, coincided with the big push given to WhatsApp after being bought by Facebook in 2014. As the number of smartphone users increased in India, so did the number of WhatsApp users. Reports suggest that for as many as 96% of smartphone users, "WhatsApp is their first choice when thinking about messenger communication" ("Global Messenger Usage", 2021). In September 2016, the launch of the Jio telecommunications network gave another fillip to WhatsApp, with its introduction of data plans which undercut all other network operators in terms of cost, bringing down the cost of digital connectivity sharply (Shrivastava, 2018). This drove up

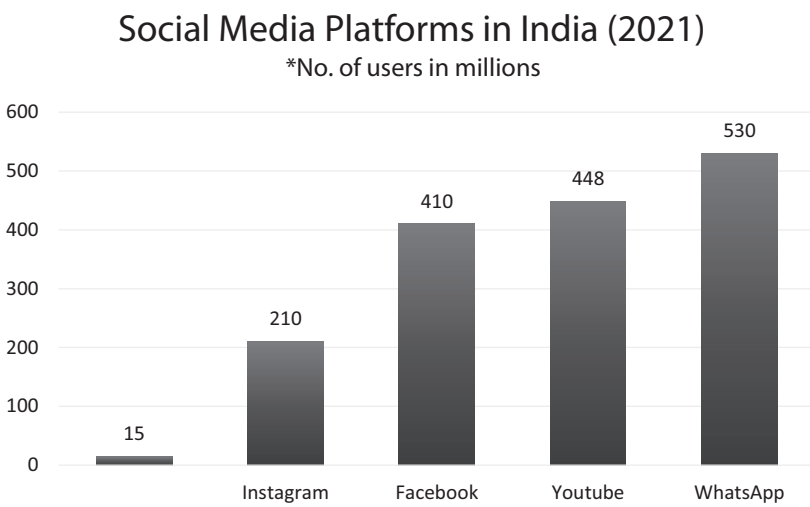


**FIGURE 1.2** Social Media Platforms in India in 2021.

*Source:* Authors' graph. https://pib.gov.in/PressReleseDetailm.aspx?PRID=1700749

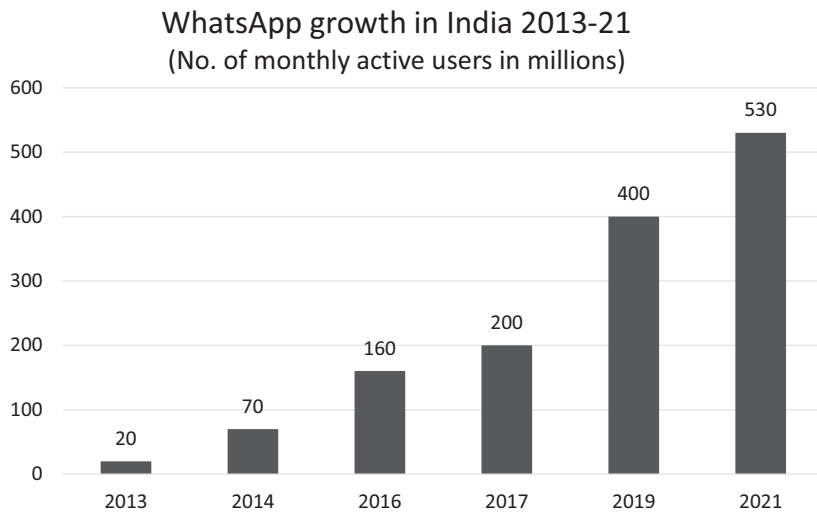


**FIGURE 1.3** Growth in Number of WhatsApp Users in India 2013–2021.

*Source:* Compiled by the authors. From www.livemint.com and https://pib.gov.in/PressReleseDetailm.aspx?PRID=1700749

the usage of WhatsApp yet again, nearly doubling the numbers between 2016 and 2018. In comparative terms, India has some of the lowest costs of data for Internet connectivity in the world.

In January 2021, WhatsApp changed its terms of service and announced a new privacy policy where it was preparing to share metadata with its other sister platforms such as Facebook and Instagram. This was purportedly to help facilitate WhatsApp business usage. As a reaction to the announcement, as well as a tweet by mega-influencer, tech entrepreneur Elon Musk to "Use Signal", a dramatic increase in the number of downloads of the Signal app happened, so much so that it resulted in a global outage (Chakravarti, 2021). Reports say there were as many as 2.3 million installs in India alone between 6 and 10 January 2021, which was a third of the global number and the largest number for a single nation. Downloads for the Signal app stood at 7.5 million worldwide, up a whopping 4,200% over the previous week. Similarly, the application Telegram messenger also witnessed a surge in downloads worldwide, with India accounting for the most. There were 1.5 million installs of Telegram in India, accounting for 16% of downloads in that period (Hamilton, 2021).

WhatsApp had given a deadline of March 8, 2021, for users to accept its new privacy policy but had to beat a hasty retreat in the face of consumer unrest and extended the deadline of acceptance to May 15, 2021. Even the Ministry of Information Technology came to the rescue of consumers,

expressing a strong stance against the "all or nothing" approach taken by WhatsApp. However, parent company Facebook's CEO, Mark Zuckerberg, defended the move saying that they merely wanted to encourage WhatsApp as a business tool and the change in policy was meant for that alone. He insisted that chats and calls continue to remain encrypted and that the acceptance date had only been moved to enable users to understand the issue ("Zuckerberg, 2021"). However, by May 8, 2021, a WhatsApp spokesperson said "no accounts will be deleted on May 15 (2021) because of this update and no one will lose functionality of WhatsApp either" (Aryan, 2021). But amidst some reports that account holders will be sent repeated reminders and be asked to accept the policy eventually ("Won't Limit Functionality", 2021), confusion remains. As of mid-2023, the matter will depend on the provisions of the new Data Protection Bill to be introduced in the Indian Parliament in July 2023.

The question is whether WhatsApp can afford to lose users. Nikhil Pahwa (N. Pahwa, personal communication, 8.12.17) explained the importance of users to a platform. According to him, social media platforms

> operate on the idea of creating fragmentation and monetizing aggregation … the value in WhatsApp comes in from increasing the number of users. Internet businesses are not necessarily built with the idea of figuring out how to make money. They figure out how to make money when they have enough users. The terms and conditions and policies are meant to change once there is enough scale because then the negotiating ability of each single individual user is going to be very, very low.

Prophesying this ongoing dilemma as far back as 2017, Pahwa said,

> so, once I am on WhatsApp and WhatsApp changes its terms and conditions to say they will share some data with Facebook, which is what happened last year, then I can't leave it any more. So, I have to accept the terms and conditions. Tomorrow if they change the terms and conditions again, even if they seem unfair, my propensity to move will be very limited.
>
> *(N. Pahwa, personal communication, 8.12.17)*

While a lot has been written about WhatsApp in India in recent years, most of it pertains to news stories regarding changed privacy policy and other features. However, there is very little in the way of academic research or in-depth investigation into the many ways that WhatsApp is impacting lives in India or what value people and communities are deriving from it. This book attempts to understand in a holistic fashion how WhatsApp is being used in India, why it is being used and the kind of impact it is having on its users.

## Why the Focus on WhatsApp

A study by GlobalWebIndex and WeAreSocial, digital research groups, in 2019 highlighted the fact that more people prefer to communicate using messenger apps than other social media platforms that are seen as being "open" (Malik, 2019). The study was based on a sample size of more than 3,100 people from the United States and the United Kingdom and found that three out of five users preferred using messenger applications to connect with others. As far back as 2016, "The Messaging Apps Report" from *Business Insider Intelligence* had said that messenger apps had surpassed social networks in popularity, due to their "higher retention and usage rates" ("The Messaging Apps Report", 2016). In another article, "Why Messengers Are Becoming More Popular than Social Media", Irina Kvashali quotes Mark Zuckerberg, founder of Facebook, as saying that "Messaging is one of the few things that people do more than social networking" ("Why Messengers Are", 2019).

But the Covid-19 pandemic had brought about a major shift in the way people were engaging with social media platforms, including messenger apps. In its 2020 report crystal-gazing into the future, WeAreSocial states, "People are re-evaluating the things that are most important to them", and that includes their social interactions via digital media ("Think Forward", 2020). The very digital media that were thought to be responsible for having a "negative impact on our offline relationships" were held on to as lifelines in the near absence of offline interactions. The report "Think Forward 2021: The Social Reset" mentions how during the pandemic "local tool kits for how to protect the vulnerable were templated and shared", including on WhatsApp.

As of January 2021, Facebook and YouTube led the pack regarding the number of global active users with 2.740 billion and 2.201 billion users, respectively. But WhatsApp with 2 billion users worldwide and Facebook Messenger with 1.3 billion followed close behind ("Digital 2021", n.d.). In terms of engagement, among social media, Facebook led with global cumulative time spent at 19.5 hours per month per user, and WhatsApp followed closely with 19.4 hours per month. Of course, in terms of video streaming apps, YouTube led with a tally of 23.2 hours per month average time per user. Among the predictions that the report makes is about portable digital identities, saying that for apps like WhatsApp, "a 'decentralised' approach to digital sign-on might come to the fore" (Kemp, 2021).

Overall, the popularity of messenger apps may be attributed to many appealing features such as personalised engagement, being data-light, many extra features along with chatting services; real-time communication; secure video calls; asynchronous conversations; and the first "digital care channel" (as people now prefer texting on messenger apps rather than calling on

phone or via social media). For business purposes, chatbot engagements, replacement of emails by messenger apps and one-on-one engagement with customers are the other benefits (Jame, 2018). The broadcast feature, which allows one to simultaneously send messages to a list of chosen contacts without having to select them every time, and the group messaging feature have been important reasons for the growth of WhatsApp in India, as these have been applied to all kinds of uses – political, personal, business etc. In Spain and Latin America, broadcast lists are popular with media houses (Baulch et al., 2020).

## Media, Technology and Society

Understanding WhatsApp requires theoretical insights overlapping from the disciplines of communications, sociology, psychology, law and economics. Whether it's understanding the social dynamics of WhatsApp groups or the impact on the individual forwarding or receiving messages on WhatsApp, regulating this platform, circulating political information or doing business on WhatsApp building blocks of some classic theories have enriched our discussion and furthered our understanding.

The explosive growth of communications technology and its applications, especially social media platforms in the past decade, has meant that theories of technological determinism are back in fashion. Innis' (1950) views of media and civilisations can be applied to digital media and an information civilisation. McLuhan's (1962) cryptic phrase "the medium is the message" has acquired a whole new meaning with the way digital media is produced and consumed currently. The way information is flowing in India today through the messages on WhatsApp has in fact inspired the authors to turn this well-worn phrase on its head to declare that the messages have indeed become the medium.

The political economy approaches have also taken technology as a central parameter. Newer approaches such as Zuboff's (2019) have used the catch phrase *surveillance capitalism* to describe the model of data harvesting and profit-making by Big Tech companies. The economics of how technology companies can make profit from social media platforms explains their trajectory of growth. However, some classic approaches are still relevant to understanding people's usage of WhatsApp.

The basic contours of the growth of WhatsApp across India can be understood in terms of Rogers' classic study (1962) on the "Diffusion of Innovations" approach across a society. The spread of any technology, device or even social media follows a certain pattern of a few users called early adopters, then more and more users till the innovation becomes widespread. The pattern of spread in India is such that the early adopters of WhatsApp were more urban than rural, more rich than poor since it necessitated using a

smart phone, more male than female and more in the younger demographic than elderly people. Many factors are responsible for the digital divide in the nation; Pandey (2016) believes that despite the government's push towards "broadband for all", "the digital divide in its real sense can be bridged only by those who have access to other resources – social and economic". Meanwhile, Seshu (2016) says, gender is another big factor to consider, as even when somehow women get access to digital media, "the harassment and abuse faced by women users of the internet can lead to another kind of marginalization" (p. 252).

The qualitative aspects of why people use WhatsApp and how it is used can be better understood by applying psychological theories such as Suler (2004) as well as communication-based theories such as Uses and Gratifications (Katz et al., 1973). At an individual level people use social messaging for information, education and entertainment; they use it for self-expression and identity formation. According to Manoj Sharma, a psychologist with India's leading psychiatric hospital, the National Institute for Mental Health and Neuro Sciences (NIMHANS), WhatsApp provides a platform to get connected and somewhat enables the psychological need for affiliation, need for approval and need for recognition (M. Sharma, personal communication, 3.8.2018). However, people using digital media display traits such as aggression, disinhibition, narcissism or even more benign aspects such as philanthropy (Wallace, 2016).

The dimensions of WhatsApp groups can be considered along the lines of Benedict Anderson's (1983) theory of "imagined communities". In Anderson's terms, people who consider themselves to be a part of a socially constructed group are part of the "imagined community" called the nation. The role of mass media in the formation of "imagined communities" is via mass messages, often in vernacular languages and images. Anderson's theory was based on print media and vernacular media, but it may be possible to extend his theory to digital media, specifically social media such as messaging platforms. WhatsApp groups often form virtual communities where the group members identify themselves on the basis of some common characteristic. It could be a family or a school or college alumni group. Alternatively, it could be an interest-based group such as gardening or cooking. It could also be an employment- or office-related group. Language is also an important element in affiliation to a WhatsApp group. These WhatsApp groups are fertile grounds for circulation of all kinds of information – personal, commercial and political. Some true, some false. Some propaganda studies such as Jowett and O'Donnell (2018) have shed light on the circulation of propaganda and politically charged material on WhatsApp.

Scholars have studied the psychological mechanisms that encourage prolonged use of social media apps, including messenger apps and gaming. Montag et al. (2019) in their paper published in *the International*

*Journal of Environmental Research and Public Health* suggest that elements of messenger apps are contrived in such a way to encourage time-spend on apps. For instance, the feature of endless scrolling keeps users "more absorbed", while the "endowment effect/mere-exposure effect" is one where users experience "ownership and loss aversion" as s/he keeps returning to the app and invests more time. Then there is "social pressure", like the one exerted on WhatsApp to respond immediately once the blue tick appears for a read message, or a notification of a new message. Apps like Facebook show users more of what they like, leading to stickiness on the part of the user. "Social comparison and social reward" such as the thumbs up on posts or the Facebook "like" button also encourage greater usage of social media. One more effect the paper talks about is the "Zeigamik effect/Ovsiankina effect", which is the compulsive way a user returns to an app to complete a task that has been interrupted, e.g. completing the levels of Candy Crush game.

Arnold and Schneider (2017) opine that the success of messenger apps is based not only on them being cost-effective, but also on "superior need fulfilment and likelihood, enjoyment and satisfaction of application usage", with their rich interactive format, facility for group chats, awareness and notification functions, voice messages and presentation of the self via profile picture.

Other than psychological approaches, sociological approaches also can further our understanding of the social messaging phenomena and how individuals are connected to larger social units via WhatsApp groups. According to sociologist Susan Vishvanathan, social media has its own rules of etiquette. Every group has its own code, conformity or grammar just like real-life rules for interactions. Kinship and solidarity are related to time and circumstances. New media has the promise of collapsing caste and class distinctions. Democracy and science engage in interesting ways in digital media according to Vishvanathan (S. Vishvanathan, personal communication, 24.11.2017). Sociologist Maitreyi Chaudhury, who is interested in political sociology and political messaging, believes that messages in WhatsApp groups are like belonging to several parallel conversations. It is narrow-casting in the sense that the planes of these different conversations rarely meet. For example, family, friend and work affiliated groups are based on different interests (M. Chaudhury, personal communication,19.12.2017).

Given the above interdisciplinary theoretical approaches, it was felt that WhatsApp as the most-used global messenger platform, with highly engaged audiences, needed a comprehensive exploration of different aspects. Its droves of users in India prompted close scrutiny on our part. In fact, academic curiosity to understand WhatsApp in India – why it was being used, how it was being used and what impact it was having – was the driving force of this research-based study.

## About this Book

A number of studies have been undertaken about digital media and its impact; our previous publication (Narayan & Narayanan, 2016) included. The very nature of messaging apps sets them apart from the other social media platforms. They facilitate intimate conversations that could be one-on-one or in (mostly) trusted groups, whereas the other platforms are relatively more public. Certain features, such as video calls, approximate the gold standard of communication i.e., face-to-face conversations. Besides, an app such as WhatsApp is so easy to use, the elderly as well as children are able to access and make use of it. Literacy is also not a barrier since illiterate or semi-literate persons are using voice and video features to communicate. It has also proved to be useful to persons battling various kinds of physical challenges. In a country like India where networks may not deliver at the promised speed, WhatsApp being data-light is a preferred app. However, the digital divide is still an issue that needs to be recognised, with overlapping dimensions such as gender, poverty, age etc. being taken into account.

In addition, it is encrypted, which implies users can feel some confidence about surveillance concerns. Voice notes, voice and video calls are other features that make it a must-have in India, removing the barriers of literacy and urban versus rural. Overall, intimacy, privacy, ease of use, multifunctionality and being data-light are the features that make it so attractive. The technology behind WhatsApp making it so user friendly may be neutral, but the very features that make it user-friendly may make it prone to misuse and may also lead to a greater impact on users. Since a user is conversing with mostly known or trusted persons, their opinions tend to carry greater weight. If they circulate messages that are false, users may tend to believe them. Encryption means these messages remain beyond the government's or any other kind of oversight for the large part. These then can be misused by certain vested interests and other unsavoury characters. Ease of forwarding videos and photos could lead to various kinds of problems, as discussed in this book.

Of course, there are ways of using the same app for good too – one can privately report stalkers etc. or talk about psychological issues to a counsellor; soldiers on the borders can keep in touch with their families, exchange of pdf files and other documents is made so simple, helping office administration and many others.

To sum up, the book has looked at the platform from a wide perspective, the interface in front, the usage, the regulations as well as the impact on different categories of users. The methodology adopted is qualitative and includes secondary data analysis and a self-reporting survey, as well as elite interviews. Anecdotal evidence and focus groups have also been used to gather data. The book was written over the period 2017 to mid-2022. While

we had engaged with issues related to the spread of new media in India in our earlier work, we were struck by how pervasive WhatsApp had become in India within a short span of time, how it was used in myriad ways and how it appeared to be impacting daily life. This led to an in-depth enquiry into the communication aspects of WhatsApp, which eventually evolved into the current book. Since we are communication scholars, the prism through which WhatsApp was viewed was communications foremost, though we acknowledge it is an interdisciplinary work.

Given that WhatsApp is encrypted end-to-end and tools for collecting data online with other platforms such as Twitter do not apply to it, we decided to pursue our research objectives based on secondary data such as published reports, books and research articles and primary data gathered through the more traditional self-reporting survey format as well as elite interviews and focus groups. Anecdotal evidence gathered via informal methods among the authors' extended family, friends and acquaintances also gave interesting insights. Other scholarly studies of WhatsApp faced with similar lack of access to data from the parent company Meta and WhatsApp company have relied on mixed methods and ethnographic research. Although other countries such as Brazil and the United States have a substantial number of users, they are only a fraction of the Indian user base. Hence, our book, while no doubt having insights into the global use of WhatsApp, is primarily an enquiry into the WhatsApp phenomenon in the Indian context.

The survey of users was designed for qualitative research, the questionnaire administered was open-ended and was based on convenience sampling or availability sampling. While the shortcomings of this methodology are well known, in the absence of data provided by the app company itself and any institutional funding, this seemed the most appropriate for this book. However, the methodology chosen is adequate to answer the research questions posed about WhatsApp's usage and impact. The survey and interviews helped in gaining valuable insights which could also give direction for further research in the future.

Thus, this research primarily relies on a survey and interviews to gain insights into the WhatsApp phenomenon in India, why people are using it and for what, as well as what impact it has. The survey for understanding the use of WhatsApp was conducted in 2018. It was based on convenience sampling and had a sample size of 205. The categories of those surveyed mainly included Indian nationals who have been categorised based on geography or region-wise, as also special groups such as students, the armed forces and foreigners in India. The metropolises of Delhi, Mumbai and Bengaluru collectively have the most respondents at 98, with the lion's share coming from Delhi at 79. Another chunk of students responded from the Union Territories of Jammu and Kashmir as well as Ladakh, accounting for 23 of those surveyed. From the "Hindi belt", there were 11 respondents

from Varanasi, 8 from Allahabad, 7 from Lucknow and another 4 each from Vadodara, Pratapgarh and Patna, followed by 1 each from Jaunpur, Gwalior, Indore and Ranchi, taking the total to 41. The sample is skewed towards North India.

In the north-east part of the country, four respondents from Agartala, the capital city of Tripura, gave the authors some insight through their responses. From the cities of Kolkata, Port Blair, Hyderabad and Mysuru, one respondent each answered the survey questions. Aside from this, 12 respondents were from the Armed Forces personnel category, while 21 foreign nationals in India responded to our queries. The survey has an urban bias, though some attempts have been made to include some respondents from tier 2 and tier 3 cities. The responses were analysed in an interpretive manner as is typical of qualitative research. Insights were derived, which are of wider interest given how widespread the use of WhatsApp is. Granular data from surveys is presented in the chapters, with overarching insights in their conclusions.

Gender-wise, of the 184 respondents from India (excluding foreigners temporarily in the country), 101 were women and 83 were men. Student respondents numbered 107, of which 39 were men and the remaining women (64%). Among the 12 teachers who responded (including college faculty), 6 were men and 6 were women (50%). Twenty-seven corporate

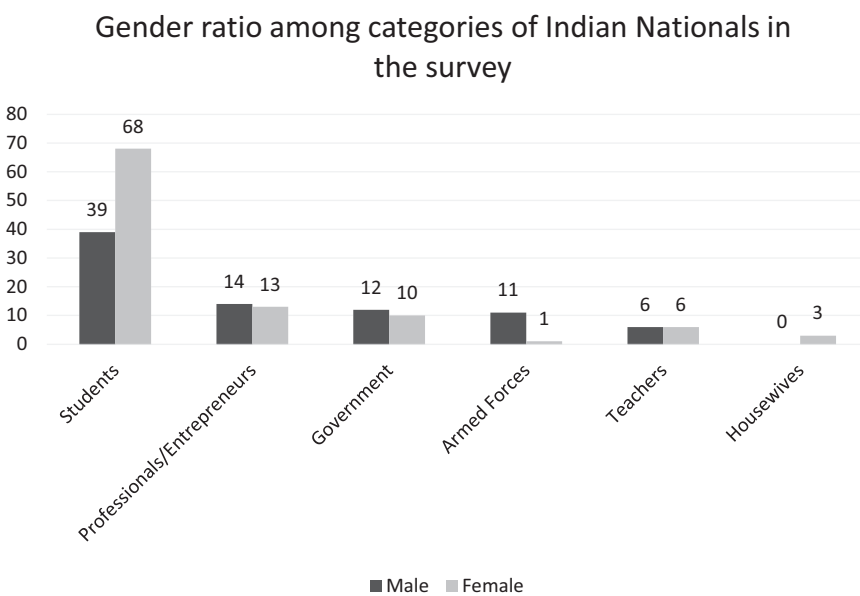


**FIGURE 1.4** Gender Ratio within Categories of Indian Respondents in the Survey.

*Source:* Authors' survey

professionals and entrepreneurs responded to the survey, with men constituting a slightly larger chunk in this group with 14, while women numbered 13 (48%). Of the 23 who responded from the government sector, 13 were men and 10 women. A lone woman responded to the survey of armed forces personnel out of a total of 12. Three housewives also took the survey. The gender skew among the armed forces has been very wide, while others have largely been proportionate, except for students where women outnumbered men to some extent.

All of these (184) were in the age group between 20 and 55, except for six, one of whom was a 16-year-old student and four others who were in the 56–75 age bracket. All student respondents in Delhi, the Union Territories of Jammu & Kashmir and Ladakh were aged between 20 and 26.

Triangulation of data was attempted by collating insights from detailed elite interviews and matching them with trends from the survey. There were 31 interviews undertaken which were face to face. Certain chapters, such as regulatory challenges, were informed by interviews with technology and legal experts, as well as extensive secondary data. The chapter on persons with disability also used interviews and focus groups to draw important conclusions regarding the use of WhatsApp by different groups of challenged persons such as visual, speech, hearing and motor challenged. The authors gained valuable insights on the different aspects of political communication by interviewing communications strategists. The chapters on the personal chats and psycho-social dimensions of WhatsApp were based on interviews with sociologists, media scholars and psychologists, and were also enriched by secondary data. The chapter on professional usage of WhatsApp drew on interviews with senior bureaucrats, officials from the non-governmental sector and corporate executives. Business users of WhatsApp formed the subject matter of yet another chapter. Advertising experts gave insights into how this space functions. Anecdotal evidence has also been included as it emerged from the survey, elite interviews, informal interviews and even secondary data such as published reports.

The qualitative method approach has been useful in the study of the issues connected with the overlap of digital communications and society. The subject of research here is interdisciplinary and cuts across many dimensions such as psychology, politics, law, sociology, advertising etc. The one thread running through them all unifying the enquiry is the communications angle cutting across all the subareas in relation to WhatsApp.

## Overview of the Chapters

As is evident here, Chapter 1 is the introduction, which indulges in an overview of the entire book and the inspiration behind it. It briefly summarises the chapters and indicates the scope of the book.

Chapter 2 examines some of the theories connected to communications, sociology and psychology that have a bearing on the WhatsApp phenomena. The psycho-social impact of using social media platforms, in particular WhatsApp, with inputs from eminent psychologists and sociologists has been studied. It seeks to provide insights into users' minds, why people use WhatsApp, how they are impacted by content on WhatsApp, why they forward it and so on. These same principles help in understanding the trends from the survey and interviews cross cutting other chapters.

Chapter 3 looks at what a broad cross section of Indians have conveyed to us about their use of WhatsApp for personal communication. It dwells on the question of why respondents want to use WhatsApp. The chapter opens with a discussion on the phenomenon of *Good Morning* messages on the app and its widespread popularity in India. It then looks at various groups' usage of WhatsApp – students, armed forces, foreigners and people in different cities across the geographical spread of India. The survey responses are analysed regarding the kind of content people prefer on WhatsApp or the features of the app that they like, whether they think the extended family has come closer, thanks to the app, their favourite emoji and their estimation of their time-spend on WhatsApp. Of special interest are the responses of those in the conflict-ridden terrain of Jammu and Kashmir, who are utilising the app for personal communication. A short box details the story of Toshi, an LGBTQ activist who has found WhatsApp a useful tool to sustain conversations about subjects that are still to some degree taboo in India.

Chapter 4 covers the issue of political communication and WhatsApp. The use of WhatsApp to spread politically motivated communication has become prevalent as has been witnessed in elections in India in the last few years, with the last national elections, in fact, being termed the "WhatsApp elections". Before that some state elections also saw a shifting of focus from other media platforms to WhatsApp and these have been highlighted too. How and why this platform lends itself to such communication is the subject of study of this chapter. The social media structures of the main political parties, with special emphasis on WhatsApp, are also discussed at length here, informed by an interview with a political communication strategist. Survey responses on whether politically motivated forwarded messages are being received and whether it is felt that those influence opinions are analysed. The content creation "factories", the use of humour to carry a political meme forward, caricatures, polarisation techniques, equivocation on WhatsApp groups etc., all form part of this chapter.

Chapter 5 delves into the all-important issue of fake news on WhatsApp, which is thought to have had an impact on offline lives too, sometimes fatally. Fake news in the time of a pandemic had muddied the waters further. The

issue of medical misinformation pertaining to Covid-19, as well as for other health behaviours, has had some disastrous results, which are highlighted here. Scholars have been studying the phenomenon of fake news, especially on messaging platforms, in the hope of understanding it, in order to be able to counter it. The major studies regarding fake news find place in this chapter. Respondents to our survey have also given some insights on how they perceive fake news and what they think could be good ways to regulate it.

Chapter 6 seeks to understand the complexities of regulating a social messaging app such as WhatsApp. WhatsApp adopted end-to-end encryption in September 2015 and assured its users of complete privacy. However, a self-confessed WhatsApp addict, Sudhir Yadav, recently moved the Indian Supreme Court to ban it in the interest of national security. Though the court refused to ban WhatsApp, questions of individual privacy versus national security remain (Anwer, 2016). Issues of data mining, data security etc. are also under debate. The question of intellectual plagiarism and false news are also important areas of discussion. Regulatory issues pertaining to WhatsApp span the spectrum from violent crimes such as lynchings and rape to financial irregularities and illegal surveillance. Recent guidelines issued by the government regarding the functioning of intermediaries such as Facebook, WhatsApp and Twitter have been controversial and have been explored in this chapter. The current debates about digital media and data protection and privacy are also touched upon here. This chapter utilises secondary data, in-depth interviews with lawyers and policy analysts as well some insights from the survey.

Chapter 7 takes up the issue of how certain disadvantaged sections of the population are using WhatsApp in innovative ways. How is WhatsApp being used for those living with disabilities compared to others? Is WhatsApp empowering people with disabilities or are they just being swamped with useless information? This aspect has been investigated by having in-depth interviews and some focus groups with people with visual, motor and speech and hearing challenges.

Chapter 8 studies how WhatsApp is being used by professionals to communicate regarding their work. Government officials are also informally using WhatsApp for internal communications because of the sheer ease of coordination and communication. But how this is impacting their lives professionally and personally is a question that is the subject of concern in this chapter. Also, the problems of using WhatsApp in office situations are discussed. Elite interviews with those from the government, non-government, corporate and academic circles are used to illustrate the issues, as well as insights from the survey.

Chapter 9 looks at the use of WhatsApp for business. Starting with the case study of a small business run by a non-profit organisation, the chapter looks at WhatsApp as an aid for small businesses. Then it explores how the

large corporations are making use of WhatsApp to create a "retail relationship". WhatsApp for Business is also explored and its possibilities analysed. Two luminaries from the marketing world give some insights into marketing strategies with WhatsApp. Lastly, a comparison is drawn between WhatsApp and WeChat, the Chinese app that provides end-to-end business solutions also within the app. A short case study on *The Quint*, a news platform which established itself on the strength of social media, particularly WhatsApp, shows the possibilities of its usage to reach a young audience.

Chapter 10 wraps up the arguments of the book in a brief conclusion. It reiterates the major trends uncovered, the implications and points to the directions for future research. It also throws light on some of the current debates regarding WhatsApp, such as privacy and security. It summarises the findings of each of the areas studied vis-à-vis WhatsApp.

The Covid-19 pandemic had enmeshed the world in its dark embrace. Digital media and communication have grown rapidly in 2020 and 2021. Researching about an app like WhatsApp which keeps evolving, means studying the contours of an ever-changing phenomena - essentially keeping up with a moving target. WhatsApp has shown a rapid trajectory of growth in the last two years. The ways in which it is being used have broadened considerably from its initial text phase. As such, the scope of the book widened considerably in the period of the study 2017–2022. In a post-pandemic world, the might of the big transnational communications technology companies is a force to be reckoned with. The arrival of artificial intelligence in the public imagination in 2022–2023 is also going to change information, distribution and consumption in future.

We have struggled with keeping abreast of new developments and going back to the material constantly to update, change and edit. The scale of WhatsApp in India at 530 million plus users in March 2021 is vast. The scope of the book is ambitious and represents approximately five years of research and analysis. It is hoped that it sheds some light on WhatsApp in India and more generally social messaging across the world since India has such large numbers of users. As such, this book attempts to fill a void in the academic literature as there is no comprehensive research-based study on WhatsApp and its consequences on users and society in India.

## Note

1 In Sanskrit language, *maya* is referred to as: "*Maya* is the illusion that the world is as it is perceived via the senses: sight, sound, touch, taste and smell. It is the apparent reality of the material world. … Taken to a deeper level, maya represents the perceptions created by one's beliefs, senses and upbringing – things that he/she or society in general hold to be true. These could be the result of political, spiritual, social, religious or economic forces". www.yogapedia.com/definition/4986/maya accessed on 20 July, 2023.

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# 2

# SOCIAL MESSAGING

## The Theoretical Framework

*Shahana gets up 10 times a night. What is her problem? She has a compulsive need to check her WhatsApp messages. Her sleep is disturbed, she feels tired and lethargic in the day time. She is an urban Indian in her 20s. This is symptomatic of a larger malaise. She often takes Selfies, changing her WhatsApp Display Picture (DP) frequently. Her selfies used for DPs are photoshopped to always put her best face forward. Her Status updates on WhatsApp give a real clue to her emotional state which she is often unable to verbalise. Her good night to her parents in the next room is via an emoji on WhatsApp. She's worried when the man she likes doesn't reply immediately to her messages. The awaited two blue ticks meaning he has seen her message leave a pregnant pause with mounting anxiety till the next flurry of messages. Sometimes she even gets work-related messages from her colleagues at night, leaving a fresh spiral of anxiety regarding the following day. It's not all bad though; she watched her nephew's latest baby video on her family group as well as laughed at a couple of political jokes. She is not alone as an over 530 million Indians are on WhatsApp as of mid-2021. Negotiating WhatsApp group dynamics requires insights from Freud to Sun Tsu to Machiavelli to McLuhan to our very own Chanakya.* (Shahana [name changed], personal communication, 25.11.2022)

### WhatsApp Characteristics: The Appeal of the App

Social messaging is a subset of social media that includes Facebook Messenger, WhatsApp, Signal, Telegram, WeChat and others. The salient

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characteristics of WhatsApp that make it user-friendly are immediacy, free, convenient to use, intimacy, data light, different language scripts, pictorial emojis, audio and video calling. In addition to these, features which allow one to see the time the user last used the App, the ticks that indicate whether a message has been viewed or not, in case that feature is enabled, the ability to connect individually or in groups, all make it a versatile and attractive platform (Lekach, 2020).

If you have a smartphone and a data plan, if you are Indian, most likely you have WhatsApp. In fact, it is so popular that it is often a driver of growth for both purchasing smartphones and for buying data plans, as suggested by anecdotal evidence[1]. In the near future, demand for smartphones in India is expected to grow at a high rate from the rural areas. India will have 1 billion smartphone users by 2026, according to a recent study by Deloitte ("India to Have", 2022). In rural, urban and even suburban areas, many persons like to use the WhatsApp. Its audio and video features make it easy to use even for non-literate and rural audiences. Some of the social trends that have come to light regarding the spread of WhatsApp across India were noticed when mobile phones first came to India.

Mobile phones removed barriers and collapsed hierarchies (Jeffrey & Doron, 2013). While typical Indian hierarchies of income, class and gender were breached by the mobile phone and its rapid spread across the Indian terrain, social media have taken things to a whole new level. WhatsApp may be the second generation in terms of collapsing hierarchies. It is used widely with social sharing being a motivation. Now even the barriers between the head of the family and the children, the employer and the employee, friend and acquaintance, colleagues and friends have been blurred on this platform, which can put all on the same virtual footing. In terms of communication paradigms, social messaging apps like WhatsApp privilege participation, and also facilitates horizontal over vertical communication networks. It can enable both top-down, bottom-up, horizontal, one to one and group communications. WhatsApp can be both destructive and emancipatory simultaneously. It can both deepen and undermine democratic processes (Cheeseman et al., 2020).

Social messaging apps are now among the most commonly used social media globally (Dollarhide, 2023). Instant messaging through platforms such as WhatsApp or Facebook Messenger, WeChat, Telegram etc. has the advantages of facilitating communication between co-workers and classmates, improving family relationships, strengthening social and friendship relationships, etc., as well as reducing isolation and loneliness. It can also have numerous negative consequences which are enumerated later.

In order to understand the spread and impact of this multifaceted platform called WhatsApp, a theoretical framework can be employed to make sense of this vast network and its impact. Some classic theories and theoretical

constructs are enumerated below, which may be applicable to the WhatsApp phenomena. Some other newer theories specially formulated for the study of the internet and digital media are also included. As befits an interdisciplinary perspective of examining WhatsApp in the Indian context, some select theories and perspectives are culled from communications, sociology and psychology as helping to further our understanding of WhatsApp whys and hows. Since the scope of this study is ambitious in attempting to look at the WhatsApp phenomena in India holistically, various theories and perspectives have been included – secondary sources as well as primary sources based on semi-structured interviews with eminent sociologists, psychologists and communications scholars.

## Theoretical Underpinnings

### *Imagined Communities*

The landscape of WhatsApp groups can be aligned with Benedict Anderson's (1983) theory of "imagined communities". In Anderson's terms, people who consider themselves to be a part of a socially constructed group are part of the "imagined community" called the nation. The role of mass media in the formation of "imagined communities" is via mass messages, often in vernacular languages and images. This helps to create a feeling of belonging towards the imagined community. This theory seeks to explain the causes of nationalism as being the rise in importance in vernacular literacy, print capitalism and decline in importance of concepts such as divine right and hereditary monarchy. While Anderson's theory had print media and vernacular media in mind, it may be possible to extend his theory to digital media, specifically social media such as messaging platforms. WhatsApp groups often form virtual communities where the group members identify themselves on the basis on some common characteristic. It could be a family or a school or college alumni group. Alternatively, it could be an interest-based group such as gardening or cooking. It could also be an employment- or office-related group. Language is also an important element in affiliation to a WhatsApp group. This imagined community of a WhatsApp group could have a strong hold over the members in terms of their perceived allegiance to it. For example, formation of alumni WhatsApp groups from school or college leads to reunions, and re-connections among the group members. This further reinforces the sense of belonging to the group.

Like Anderson's views of imagined communities being linked to the rise of nationalism (Anderson, 1983), this may be true of WhatsApp groups in India as well. Anecdotal evidence suggests that views in many WhatsApp groups are getting polarised along the lines of what is "national" or "anti-national", especially when tensions with Pakistan mounted over the Pulwama

attack in Kashmir and Balakot strike in Pakistan, in the lead up to India's general election spread over April and May 2019. In fact, ideology surfaced as a major reason for leaving or staying on in a WhatsApp group. It is either preaching to the converted or the exit of the unconverted. So Anderson's imagined communities find a parallel in virtual WhatsApp groups, along with classic communication approaches such as uses and gratifications.

### *Uses and Gratifications*

The "active audience" communication theories have informed a fair amount of research on new media and social media as they are inherently interactive. The Uses and Gratifications theory is positivist in orientation and seeks to understand why people use certain media, and what are they used for. It was posited by Katz, Blumler and Gurevitch in the 1970s. The central tenet is that users of media are active in seeking out media that satisfy their needs. The Uses and Gratifications approach is useful in the study of social messaging apps such as WhatsApp, as it seeks to uncover the uses that WhatsApp can be put to and the various needs it can fulfil. One of the needs is the human need of relatedness, as WhatsApp can foster close bonds and intimacy (Karapanos et al., 2016). In addition to information-seeking and educational uses, this platform is increasingly being used by people for entertainment purposes. The rise of media and technology companies has been studied under the rubric of political economy of communications. The study of the ownership structure of large communications technology companies has thrown some light on their modes of working and their impact on society.

### *Political Economy of Digital Media*

Some of the scholarship on new media and digital media fits into the plane of technological determinism. Scholars of the Toronto School such as Harold Innis (1950) and later Marshall McLuhan (1962) theorised regarding the importance of communications technology and media as being of paramount importance in determining the shape and form of society and civilisations. Neil Postman (1986), the American media theorist and cultural critic in his dystopian work *Amusing Ourselves to Death: Public Discourse in the Age of Show Business* looked at the centrality of entertainment via electronic media such as the television in having a deep impact on society, albeit a negative one. He feels that "form precludes content", so electronic media would be used for entertainment in a soporific manner, rather than the rationality of information and news encouraged by the print media. The technologically determinist views have seen a resurrection with the arrival of the digital media. However, we feel that the interplay of technology and

society are important rather than the view that technology is the prime driver of social change.

The political economy of communications is an interesting way to study the rise of digital media. Following the trajectory of communication scholars such as Dan Schiller and Graham Murdoch, sociologist Shoshana Zuboff (2019) explores the political economy of the rise of technology and communications companies such as Google and Facebook. Her magnum Opus entitled *The Rise of Surveillance Capitalism: The Fight for a Human Future at the New Frontier of Power* conceptualises the growth and expansion of a new phase of surveillance capitalism. In her opinion, some time back one could focus on information society; however, now the frame has widened to that of information civilisation. "Surveillance capitalism unilaterally claims human experience as free raw material for translation into behavioral data". According to Zuboff, some data is required for product or service improvement; however, the rest is proprietary behavioural surplus utilised in "machine intelligence" and made into prediction products that anticipate what the user will do immediately and in the future. These prediction products are then traded, resulting in wealth for the surveillance capitalist. The next phase is when these capitalists shape and automate the users by means of behavioural modification. In this manner, new loci of power are located in the bosom of the surveillance capitalists such as Google, Facebook and Microsoft, enabled by an increasingly ubiquitous network of smart devices and spaces.

Zuboff suggests that Google was the pioneer of surveillance capitalism, but it was soon followed by Facebook, Microsoft and Amazon. The notion of surveillance capitalism strips away the illusion that being networked is pro-social, inherently inclusive and encouraging of democratisation of knowledge. In fact, this view is very sceptical of the technology giants, as it enables the commercial ends of the companies and is parasitic in nature. She believes the Faustian compact of the user's dependency on digital connectivity lies at the heart of the commercial surveillance project. The lure of digital networks is hard to resist as the internet is required for participation effectively in life and society. This leads to asymmetries of power between the surveillance capitalist and the user. An additional reason that users succumb to the digital onslaught is that surveillance capitalism is unprecedented, so it is hard for people to understand its ramifications, as it appears "inevitable", abstract and arcane. In Zuboff's words, "the new regime's most potent harms, now and later have been difficult to grasp or theorize, blurred by extreme velocity and camouflaged by expensive and illegible machine operations, secretive corporate practices, masterful rhetorical misdirection and purposeful misappropriation". While Google was the first off the block, the increasingly muscular Facebook followed suit, aggressively establishing a presence on the underregulated behavioural

surplus frontier, while maintaining an opaque façade against public scrutiny (p.155).

Facebook utilised internally generated meta data to give researchers insights into the user's personality. This could be used for prediction and ultimate behaviour modification, resulting in commercial revenues. This became the model for Cambridge Analytica, which used this behavioural surplus for politically inclined behavioural micro-targeting (ibid, p.258). Facebook researchers inferred that given the large number of Facebook users, small effects "can have large aggregated consequences". Spending substantial time on social media leaves a digital footprint that can be mined and monetised by companies such as Facebook. If Instagram and WhatsApp are added to Facebook, the wealth of users' data can be extraordinary.

The Facebook company started expanding its presence in the social media sector via its products WhatsApp and Instagram in addition to Facebook. Sarah Frier (2020) tracks the growth trajectory of Instagram with insider insights of what went on to turn it into the kind of app it is today. It also highlights the consistent attempt by Mark Zuckerberg to keep Facebook above the other apps in the family, as that was always closest to his heart, even to their detriment. Frier says it was the 2016 elections in the United States which made the public think about how "people and governments" can misuse social media for "ill" and that the very social media they loved could be used to "manipulate their behaviour". However, "representatives of the Facebook "family" of apps gave "perfect" responses to the allegations, saying that they wanted to err on the side of promoting free expression and limiting takedowns, embracing the solution that happened to be cheapest, necessitating the least human oversight" (p. 246). When Facebook makes the argument that "Technology isn't good or bad – it just is", Frier strongly refutes that. According to her, nothing "just is, especially Instagram because it is "not designed to be a neutral technology like electricity or computer code".

In the context of India, Arun Mohan Sukumar (2019) studies the linkages between the State and technology in the post-independent period. In this historical study, Sukumar traces the sometimes contradictory approaches to the adoption or rejection of technologies in Independent India. In his opinion, the current push for Make in India programme of the Narendra Modi government can trace its legacy back to Malviyas' belief in the confluence of the Hindu faith and technology (p, xvi). Modi's vision sees technology as vital for economic development as well as nationalist politics.

> The raft of initiatives unveiled by Modi since taking office –Make in India, Digital India and Skill India, to name a few—reflect the Prime Minister's conviction that technology and technical education can lend discipline to India's economy and society. Meanwhile Modi has also corralled and

> tamed the political energy of his Hindu voter base through Facebook, Twitter, WhatsApp and other technological tools.
>
> *(p. xiv)*

India's current technological success rests on the building blocks of previous governments. The spread of the internet, mobile phones, liberalisation of the Indian economy in 1990, all paved the way for the explosion in digital media that we see in India today. Sukumar (2019) believes, "From chairing the National Planning Committee to his death in 1964, Nehru singularly and decisively charted the trajectory of India's technological progress" (p.5). Many of the milestones in India's technological achievements, such as the setting up of IITs, IIMs, Anand Milk Cooperative, India's space programme etc., owe a debt of gratitude to Nehru's leadership. In terms of computer technology, Rajiv Gandhi pushed for adoption of computers as a way to modernise the economy.

Another strand of inquiry has been the interdisciplinary area of sociology, anthropology and digital media. This is explored in the next section.

### *Digital Media and Society*

Payal Arora (2019) attempts to examine what "the poor" use mobile phones or other digital devices for. She comes to the conclusion that the same as everyone else, they like to use it for entertainment – games, porn, romance, movies etc. Aside from "capacity to access, and the skills and opportunities to use new media", she believes there is a third divide – "motivation, driven by pleasure, sociality and entertainment". Even as governments and other agencies are spending funds to bridge the digital divide by bringing more and more low-income people into the digital sphere, when such people choose "to use their internet access for entertainment instead of for education and economic advancement", it becomes problematic for those pushing in funds for such programmes (p. 16). She also makes the point of coexistence of new and legacy media, taking the example of a village in Namibia where WhatsApp (new media) is used to circulate newspaper clippings (old media) (p.10).

Jeffrey and Doron (2013) in their landmark work *Cell Phone Nation: How Mobile Phones Have Revolutionized Business, Politics and Ordinary Life in India*, using ethnographic methods, study the impact of the spread of the ceellphone across India, affecting relationships, culture, traditional heirarchies, as also work and more broadly society. In their view the mobile phone's spread across India is an example of disruptive communications, challenging traditional hierarchies of class, caste and gender as well as having a sweeping impact across society. In our earlier work (Narayan & Narayanan, 2016), we explored the impact of new media in India across

different aspects of life – politics, business, regulation, gender, the digital divide, development etc. – and found that digital media was having a profound impact on everyday life in India.

Sirpa Tenhunen (2018), a media anthropologist, studies the impact of the mobile phone on development and also how the users actively choose to use their phones. Her work broadly fits into the Information and Communications Technology ( ICT) and development literature. An interesting finding of her research is that in rural Bengal, where she conducted her field work, people started using mobiles when the technology first became available locally, in the process leapfrogging the landline stage, unlike in the West. She also found that mobile phones helped the users to organise and coordinate their everyday lives. Her ethnographic research gives insights into the usage of mobile phones and smartphones in a rural context. However, one of the major barriers to its use was cost of internet connection and user unfriendly smartphones. Literacy was also a barrier, especially for older people as connecting to the internet generally required some knowledge of the English alphabet and numbers. As Tenhunen's fieldwork was primarily conducted in intervals over the period 1999–2013, both smartphones and internet were a rarity in most rural areas in India at the time. Usage of mobiles had complex results. On the one hand, it promoted kinship among small groups, as well as increased translocal connections. On the other hand, it led to a weakening of village identity as a whole, as mobile use and increased television use led to fewer actual physical interactions among villagers. To some extent, possessing smartphones, or using mobile phones, was somewhat empowering for women and scheduled castes, as they were considered to be status symbols. As the research was undertaken uptill 2013, the question of apps such as WhatsApp is not explored; however, there were a few young men in the village who had started using Facebook in an exploratory manner.

In her recent work, Pamela Philipose (2019) offers insights into India's changing digital landscape. She believes that even when the digital divide exists, the public ends up consuming social media content "tangentially" through mainstream media. The introduction of affordable mobile data into the Indian market was a big factor in pushing up the consumption of Facebook and WhatsApp, she says. But there are three "conundrums" she identifies with regard to digital connectivity that concern her. First is "the asymmetrical nature of access, largely because it is easier to achieve technological inclusion than social inclusion" (p. 267). The second is that even those outside the digital public spheres are vulnerable to "the dangers of the internet world, like privacy violations and digital disinformation or fake news". And last is the commercial and political actors taking control of audiences through devices and technology-driven strategies, including creation of "information bubbles and echo chambers" (pp. 270–1).

Sam and Guha Thakurta (2019) have critically analysed how Facebook and its subsidiary platforms, such as WhatsApp, have been involved in promoting a certain "social and political agenda" (p. xxxiv). In their work, they pose the salient question as to what extent digital media are able to influence political preferences and electoral outcomes.

In addition to communication theories and perspectives, findings from recent research on digital media throw some light on how WhatsApp is consumed and the impact it has.

## Research Insights

In 2018, WhatsApp invited proposals for grants for the study of misinformation propagated on WhatsApp from "any social and technological perspective" ("WhatsApp Research Awards", 2018). Some interesting insights emerged from this research. In a 2021 US study (Sundar et al., 2021), it is suggested that "richer modalities like audio and video" can make people more susceptible to fake news. Another research study from Argentina and Brazil shows that when the public already have "less trust" in their political system, and they are politically polarised, they are more susceptible to misinformation (Lupu et al. (2020).

A research study undertaken in Indonesia, published in 2020, comes to the conclusion that women in that country use WhatsApp to "support their existing social relationship", and misinformation reaching them via friends/school alumni groups (the biggest source of fake news) was mostly ignored by them as "Indonesian women tend to avoid argumentation with other members" (Kurnia Novi et al., 2020). An interesting way of countering misinformation was suggested by another research study which demonstrated the effectiveness of playing the "fake news game" to help people get "inoculated" against fake news. The game "boosts people's confidence in their own judgements" and hence dissuades them from sharing "false content" (Roozenbeek et al., 2021). Such studies have brought a richer understanding of how the messaging app impacts us.

Many of the youth responding to a research study in Agra, India, indicated that they joined WhatsApp because it was a convenient form of communication, and it was more cost-effective as well (Bhatt & Arshad, 2016). They revealed that WhatsApp socialisation increased social isolation because it was at the cost of real social interactions. They also indicated that a majority of them were addicted to WhatsApp. Not surprisingly, they also revealed that they were checking their WhatsApp messages an average of 50 times a day. The majority of them also joined WhatsApp groups of close friends. Some of them indicated problems with bad grammar and sentence construction as a result of being on WhatsApp.

In addition to communication theories and perspectives, some classic and some recent, this study has also used frameworks from sociology and psychology to further our understanding of aspects of social messaging like WhatsApp.

## Sociology and Social Messaging

According to sociologist Susan Vishvanathan, social media presumes one must conform to its own etiquette. Every group has its own code, conformity or grammar just like real-life rules for interactions. Subtext is the iceberg – what lies beneath. Kinship and solidarity are related to time and circumstances. New media cancels caste and class distinctions. There is a linearity of the capitalist process, which is reinforced through new media. Democracy and science engage in interesting ways in digital media, according to Vishvanathan. The notion of empathy and compassion and digital media have been forged in India over the last decade. WhatsApp groups are important to socialise because nowadays people have less time and distance is also an issue in real-life interactions. This is particularly true of a post-Covid-19 world. In Vishvanathan's words, a "WhatsApp group is a representation of a real community". She believes that one must change with the times and adapt; there is no going back in time. In fact, the current world is constantly changing (S. Vishvanathan, personal communication, 24.11.2017).

There are a number of reasons why virtual networks such as WhatsApp groups are useful. Nowadays people are communicating through images, rather than language. WhatsApp allows for easy sharing of photos, images, videos, video calling and also has emoticons. This makes it appealing even to children and illiterate persons. For example, fishermen in Kerala are only 30% literate, still they like to interact on the mobile. Advertisers understand the use of symbols etc. very well. They understand the market better and much faster than other groups. It is ideologically formatted in terms of the capitalist pursuit of profit (S. Vishvanathan, personal communication, 24.11.2017).

Vishvanathan believes that new media, and especially social media, allows for the merging of alternate generations. Children can be affected by traditions and traditional values of their grandparents, which can be supported by mediated communication. WhatsApp can help this phenomenon. There is no difference in real life and virtual interactions, in terms of sociological processes. Simone de Beauvoir's ideas about the significance of lived experience and how the meanings of the world are revealed in language are important in this context (Holveck, 2002). "Knowing how to behave" is not that well categorised now. With a collapse of hierarchies, norms of behaviour are also not that well defined as in an earlier period.

Many of the youth are using WhatsApp and other social media in a positive way. The vocabulary of interaction of the youth has changed because

this generation uses an industrial notion of time. Physical presence is less important. On the downside, however, attention spans are shrinking in part due to new media. Other problems that can occur due to using new media for socialising are alienation or *anomie* as expressed by Emile Durkhiem (Marks, 1974) and depersonalisation (Vishvanathan, 2017).

According to sociologist Maitreyi Chaudhury (M. Chaudhury, personal communication, 19.12.2017), who has interest in political sociology and political messaging, messages in WhatsApp groups are like belonging to several parallel conversations. It is narrow casting in the sense that the trajectories of these different conversations rarely meet. For example, her family, friend and work-affiliated groups are based on different interests. She believes that the commercialisation of the Indian media that occurred post-1990 led to a "dumbing down" of content.

> This trend has been continued with new media. My argument is that along with the rise of consumption, which the media took up, there came a certain kind of discourse that the media found very convenient, for example … the smart one-liners what they call "sound bites" in television or now you have Twitter in the social media – small, abbreviated words which are very superficial but which draw attention to themselves, which have a certain logic. So, there is a general decline in any kind of reflective, informed, historical understanding, through a certain discourse which is quick, catchy. Therefore, my reference to advertisements, for that is how they operated. For example, have an advertisement which is for a few seconds, but it's extremely effective, very powerful as the message is clear. Today what was originally a discourse for advertisement has become not just the discourse of the public sphere, but also of your private WhatsApp group or of your political messaging. That has become dominant.

Apart from "dumbing down" of content and of circulating catchy abbreviated messages, there is a similarity in the dynamics of how advertisements work and how political messages are circulating and having effect. The idea of the public has got reconstituted. Earlier generations of journalists had more links to the freedom movement and issues of public concern as it is understood in the traditions of democracy. The current period has seen a different breed of communicator. In other words, the market for political messages is also segmented along the lines of advertisement markets as in up market, down market, rural, urban, niche audiences etc. Chaudhury believes that while there are some people committed to strong political beliefs, many are not committed one way or another to a particular political party or a particular political belief. In her words,

> I think what has happened in our current political discourse is the ideas of a particular political parties have tapped on like advertisers, tapped on

> what people normally believe, which we hear as stray comments in our house. It is not as if people are passionately talking about politics. But there are hundreds of comments which may be anti-minority … which circulate within a household in a very normal, everyday fashion. They've tapped into that resource. So there is a convergence of social, received ideas and the political rhetoric that is dumbed down now explicitly stated. And there's a strange sense of empowerment in that what you could not say publicly earlier, now you can easily say openly.
>
> *(M. Chaudhury, personal communication, 19.12.2017)*

In terms of the phenomena of social and political messaging and democratisation of that space, an application such as WhatsApp may show conflicting trends in India. Earlier in a world characterised by mainstream media such as the newspaper, radio or television, for example Doordarshan, it was a more elitist, rarefied public discourse with fewer people participating. Today India may be more democratic in an access sense. More political conversations are taking place. On a new media platform such as WhatsApp, the auto driver can exchange views with his customers, since it can permit non-hierarchical communication. Chaudhury says

> that access that new technology allows you … I would argue is antithetical to the democratic discourse. Democracy has to be judged not by access but by content. So, I'm basically going back to critical theorists of the old Frankfurt School where they ask is it equal to say you can do Nazi propaganda in one channel and communist propaganda in another and it's all equal. It's not. That's the idea of right to free speech and the limits to free speech. What is it that leads to a more democratic content? Democratic content … going back to the constitutional values of say equality, liberty, fraternity and it goes back to a long history that the content has to be this. It can't be that I can give you profanities and you can give me profanities back. That to me is a very dumbed down understanding of democratic discourse. Because content is undemocratic.

In other words, it is suggested that sheer numbers do not necessarily make it democratic. For example, the argument that everybody had voted Hitler to power does not make it right (M. Chaudhury, personal communication, 19.12.2017).

In the context of WhatsApp, it is very difficult to get actual data on the number of people who are actual creators of content. Most seem to be receivers and forwarders of content. A lot of the content could actually be created and circulated in a somewhat professional manner, for example good morning messages, health message, philosophical messages etc. People who take original photographs for uploading on WhatsApp often want to take with themselves in it, so there is a new sensibility of "selfie-hood" as

conceptualised by Chaudhury. This could be a new political as well as cultural sensibility. Different types of groups on social media belong to the construct of "imagined community" as theorised by Benedict Anderson. According to Chaudhury, lots of WhatsApp groups work on the basis of imagined communities,

> some are given communities like what we would call primordial communities. … See, if I look at my relatives – that primordial gets redefined, basically we're talking of identities that are not fixed. So, the communities in the modern world can be redefined. Say … the idea of the Hindu community … that's not a community that would have existed before. What is common between a Bengali *bhadralok* (gentlefolk) and a Tamilian down south? … But the sense of being the dominant community who is under siege would have resonance. So, it's an invented community in that sense. It's as invented as nationalism. … It's a very interesting way of looking at it. Then you have communities that are overtly political. Like you would have the feminist community.

In terms of violent sexual content like rape videos circulating on WhatsApp, Chaudhury is of the opinion that while the technology is new, pornography was sought out even earlier, sadly including rape as entertainment and pleasure. The problem has deeper roots when as a society in India it is accepted to show highly sexualised female imagery such as "item song numbers" in Indian cinema, which are shown almost exclusively through the male gaze. There is also a gender dimension regarding content shared on WhatsApp groups. All-male groups often share sexual content, including pornography, while all-female groups do not seem to. This is true for older age groups, "where it is assumed that women are non-sexual, but for men, their sexuality never ends" (M. Chaudhury, personal communication, 19.12.2017).

While studying the sociological aspects of WhatsApp seems to hold some pieces of the puzzle, other pieces lie in the realm of psychology and the motivations of individuals.

## Psychological Dimensions of WhatsApp

Patricia Wallace (2016), who has been studying the area of internet and Psychology from the 1990s, feels that using the internet was having profound effects on human behaviour, sometimes in surprising ways. While she neither espouses a utopian view of digital technologies nor a dystopian view that everything is dark about the internet, she does raise some interesting questions about human behaviour and the impact of the internet. Regarding the study of how the internet affects human behaviour, it is a constantly changing dynamic, likened to a moving target. "Psychological

research confirms that the environments in which humans are behaving can and does affect the way they behave" (Wallace, 2016, p. 2). Unlike the McLuhan "global village" metaphor, Wallace likens the Internet to a collection of neighbourhoods which may have less to do with geography than with purpose. People with common interests form "neighbourhoods" where they can share information, work, play, joke, debate politics etc. with each other in these neighbourhoods. Purpose has a strong influence on behaviour. People can enter and exit from several cyber neighbourhoods and they change their behaviour as they move from one to the next.

The internet also presents unique challenges and opportunities for online self-presentation. Erving Goffman (1959), who has done the foundational work in impression management theory, suggests that the motive is the most important factor regarding the strategies chosen – whether one wants to be liked by the audience, respected by them, to dominate them or to seek mercy from them. Goffman's work has applications which cut across the disciplines of sociology, psychology, communications, business management and others. Thus, the tactics for self-presentation chosen will be goal-oriented depending on the underlying motive. Online impressions can give indicators of the big five personality traits such as conscientiousness, agreeableness, openness to new experiences, extraversion and neuroticism. Thus the importance of the profile picture and declared status in the WhatsApp account. However, there is a word of caution from Wallace. While online impressions can sometimes be good predictors of personality, "but human beings don't have just one "self", and what constitutes that "self" changes depending on who we're interacting with and the context of the interaction (Wallace, p.47)".

While insights from Goffman can throw some light on strategies for self-presentation via WhatsApp, it also helps to delve deeper into motivations for using it. Abraham Maslow's (2007) hierarchy of needs can also illuminate certain aspects of social media. According to the eminent psychologist Maslow, human motivations are described as a five-tier pyramid. The base of the pyramid has physiological needs such as air, water, food, shelter etc. The next level contains safety needs such as employment, personal security, health and property. The third level has love and belonging needs such as friendship, intimacy and sense of belonging, and the fourth level has esteem needs such as respect, self-esteem, status, recognition freedom etc. The fifth level, which is the apex of the pyramid, has self- actualisation, or the motivation to become the best one can be. The first four levels are based on deficiency needs, and once these needs are met, the desire reduces. The apex level is all about being needs, or growth needs, which do not go away once they are met. Social media can help us in meeting needs at different levels. The second, third, fourth and fifth levels can all benefit from using WhatsApp.

What is the impact of using WhatsApp on the family? Navin Kumar (N. Kumar, personal communications, 17.4.2018), a media academic who

has studied the psychology of media, believes that social media such as WhatsApp are exacerbating family relations. In his opinion there are more problems, more fighting as the family as an institution gets disrupted. There are different types of family groups. When there are intergenerational family groups, the content circulated is different from the content circulating on family groups whose members are from the same generation.

However, social media is not the only reason for this family disruption, there are other factors which are interconnecting with social media to put the family under siege. There are certain socialisation or mediating factors. For example, if a child spends all her time on WhatsApp, she is likely to be more influenced by its content as compared to a child who has diversity of habits; the child spends some time on WhatsApp and the rest in real socialising, meeting people, playing etc. The level of awareness also makes a difference – for people thinking WhatsApp messages enjoy high credibility and they are the gospel truth, the impact then is likely to be higher of WhatsApp content. Yet another mediating factor is literacy level. More educated people are more likely to check the veracity of the content of WhatsApp messages from other sources. Underprivileged and less educated people are more likely to believe the content of WhatsApp messages. This is creating a lot of social conflict. It's possible that WhatsApp has more impact as compared to other social media as there is more reciprocity in it, so it will go out to a wider base. Also, there is less anonymity as compared to other social media as the phone number of the contact is revealed, along with the message (N. Kumar, personal communications, 17.4.2018).

So, Kumar suggests that WhatsApp is a mixed bag, mediated by factors such as literacy, age, amount of usage and other external factors. In addition to one-on-one communication, WhatsApp encourages communication in groups. The concept of virtual WhatsApp groups has come centre stage when we try to decode a person's affiliations and the impact of belonging to certain virtual groups.

## Theory of Group Dynamics

In Aristotle's view, a human being who did not seek companionship or support of others was either a beast or a god. To elaborate, "he who is unable to live in society, or who has no need because he is sufficient for himself, must be either a beast or a god" (Aristotle, n.d).

A simple definition of a "group" is that "a group is a collection of two or more people who are interacting with and influencing one another" (Wallace, p.57). This definition is problematic in certain contexts. It is even more problematic when we take into consideration online or virtual groups. Membership in offline groups can have strong effects on human behaviour.

Does it work that way for virtual groups as well? In offline groups where members identify with the group, are loyal to it and participate in group activities, the resulting cohesive group helps in shaping the social identity of its members.

One of the aspects of offline groups is conformity to the group's norms on the part of its members. Yet another aspect is group polarisation. Research in social psychology has found a considerable in-group bias. For example, perceived similarity with other group members, favouritism exhibited towards other group members and so on. Polarisation can occur within groups because members' pre-existing views or biases can get deepened due to their in-group interactions. Current research points in the direction of group polarisation being partly responsible for the extremism apparent on the internet and the lesser visibility of the moderate voice. To explain further, experiments in social psychology indicate that for online interactions there is a strong tendency towards group polarisation when members of the group feel some sense of group identity (Wallace, pp.75–7). However, for others who do not feel part of a group, their interactions are more individualistic. Yet another reason for group polarisation online is the echo chamber effect of the internet. People participate in discussions with like-minded persons, further reinforcing their existing viewpoints or biases. Therefore, there is a trend towards reduced moderate voices, with extreme voices becoming more dominant. The technology is efficacious in filtering out differing viewpoints, leading to more like-minded views. Group mobilisation and social movements have also been transformed by the online sphere (ibid.). The internet can assist in group mobilisation through enabling coordination activities of group members as they unite for a cause or plan a group activity.

Family and friends WhatsApp groups have become a mini battle field for some when contentious issues like currency demonetisation in India split them wide open. The Narendra Modi government invalidated the Rs. 500 and Rs. 1,000 currency notes, in November 2016, a sudden move which rendered 86% of the currency unusable. This affected everyone across the board. As long lines formed outside banks for people to change their useless old notes for new notes, which were government approved, this issue became a hot topic for conversation in WhatsApp groups, both friends and family. A typical family or friends group had pro-demonetisation posts as well as anti-demonetisation posts. The exchanges were often heated with the pro-demo family members hinting the anti-demo members were either too lazy to line up at a bank or not "patriotic enough to undergo some hardship for the good of the nation" to wipe out black money and corruption. The heated online rhetoric had definitely ramped up with the election of the Bharatiya Janata Party in 2014. There seems no middle ground now in either friends or family groups (Dore, 2016).

Similar polarisation was witnessed in family groups in the lead up to the Indian general election in 2019, with some family members extending support to the ruling Bharatiya Janata Party, while others opposing it. A flurry of forwards, jokes, political memes, opinions etc. both for and against became ammunition for this proxy electoral war. Do family bonds and friendships become stronger as a result of interacting on WhatsApp? There is a mixed picture. Vigneswara Ilavarasan, a professor in the faculty of management studies, Indian Institute of Technology, Delhi (personal communication, 10.1. 2018), feels WhatsApp has had a positive influence in nurturing family and friend bonds. For others the picture is not so positive.

### Life Cycle of a WhatsApp Group

When groups are newly formed, the interest level of members is high and they exchange a lot of information. Over time, this interest wanes and messages become sporadic, except among small closely knit family and friend groups. In Vigneswara's experience (2018),

> Once a group is started, I see a lot more people posting information about everything – the beginning period of the group, has a lot more information, people are also excited about it because you are getting to know the other person. After sometime you feel this is getting too much and after that it kind of stabilises. Most of my groups are now a year old, I would say almost stabilised. Some jokes, some memes, the only thing is if somebody has done something extraordinary, somebody has gone abroad, or some kid has done something in a family friends' group or somebody is looking for a movie referral or a TV series referral, so that kind of things are very popular. But people don't upload selfies too much. Earlier days, when they started, selfies were coming because this is how you look, everybody is excited about it. In some very personal groups, suppose in my school group is full of boys, we don't send family photographs. Even a photograph that I upload in my WhatsApp with my daughter, I don't do that in my group. But there are groups with friends with family, so you keep on sending photographs, suppose during Diwali, or during Holi. All special occasions as a family we click a photograph and send it to the group, and people also do that. So that kind of personal affinity is there. Otherwise, not much of everyday activity.

A lot of dormant WhatsApp groups got revived during the Covid-19 lockdown as people turned to social media to connect with work, friends and family.

Psychological factors are the key to decoding what motivates individuals to use new media and also the impact of using it. The following section delves into some of the major factors.

## Impact of New Media, Particularly Social Messenger Platforms

### *Aggression*

Biological as well as environmental factors may both cause human aggression. Some of the early studies on aggression online suggest that it is higher than in face-to-face groups (Wallace, p.97). Online environments have many of the features that promote disinhibition, for example frustration, anonymity, invisibility and physical distance. Frustration is likely to bring on an aggressive response. It causes a negative state of mind that can distort subsequent perception. There is also ambiguity in online communications which can cause misinterpretation and miscommunication. Anonymity can lead to aggression online when people feel their actions cannot be attributed directly to them. This is one aspect of toxic disinhibition (Suler, 2004). Existing research suggests that insults targeting our character, competence or physical appearance are the ones which cut deepest.

The implication is that certain issues or events on the internet are likely to lead to retaliation. Overretaliation of the kind which is more than an eye for an eye may be explained by the theory of cognitive dissonance as proposed by Leon Festinger (1957). This theory predicts that people feel uncomfortable when they act in a way that does not fit in with their own attitudes and perceptions. This discomfort causes tension to make the person want to align their behaviour with their perceptions. Since past actions cannot be changed, the person changes her perceptions about the particular action, to justify it. Thus, online aggression is often justified by bullies and trolls.

Cyberbullying and trolling are two terms that have come into common parlance with the internet. While cyberbullying is often at work amongst the youth, trolling is there across social platforms, age groups and interest groups. According to Wallace, "people who deliberately try to start arguments or sow discord with deceptive, aggressive, inflammatory, insulting or vile comments are the trolls of the internet" (p.110). It seems to be the dark side of political communication as well. Bullying and trolling can be seen across social media such as Twitter, Facebook and WhatsApp. To reiterate, aggression on the internet is enabled or multiplied by factors such as anonymity, physical distance, amplification, permanence and use of multimedia (Wallace, pp.116–17).

### *Attraction/Intimacy*

The Internet is redefining friendship and romance. Research suggests that in the offline world, a key ingredient of attraction is physical attractiveness, for both males and females. In fact, physically attractive persons were rated as being more sociable, intelligent, warm, humorous, happier etc. by others interacting with them, as compared to less attractive persons (Wallace,

pp.124–7). Thus, good looking people are viewed more favourably by persons interacting with them; they are treated better and more attention is paid to them. This positive treatment in turn brings out the best qualities in the attractive persons and makes them more confident. Other factors that determine attraction are proximity and familiarity. Familiarity leads to liking and attraction. People often fall in love with or marry a classmate, office mate or the boy or girl next door. Research suggests that this positive emotional attachment is often formed at an unconscious level. Yet another factor in attraction is similarity. In fact, research suggests that opposites do not attract. Similarity of ideas and attitudes leads to attraction. This is called the law of attraction. "The findings show a direct linear relationship: the greater the proportion of similar attitudes, the more attracted you are to that person" (Wallace, p. 128; P. Murthy, personal communication, 1.8.2018).

The dark side of attraction and disinhibition on social media is that many women and children are actually suffering harassment on the internet. Vigneswara (2018) mentioned that his wife was harassed on WhatsApp.

> My wife also gets a lot of Hi, Hello messages, because her number is available. She runs a small company. One year back, I think, she promptly put this on Facebook saying that just because I'm a woman and I'm running a company, doesn't mean I'm available for everything, you cannot really keep on greeting me every day morning and evening, you have any serious business to do, you can communicate with me or otherwise stop this nonsense. In WhatsApp also people meet her in meetings and everything, she shares her number. When people start sending her such messages, she blocks them immediately.

Amita (name changed), a senior faculty at a government institute in New Delhi {Anita (name changed) personal communication, 10.1. 2018} has also experienced harassment on WhatsApp, as a result of which she had to block three people on WhatsApp. When questioned about the nature of the harassment she replied,

> At around 11:30 p.m., "You are beautiful" type of messages from acquaintances. I remember a young Captain I met and he said, "can I have your number, my sister wants to study Communication so will you be able to help?" I said obviously. He was a nice gentleman, from the Army, you always have respect for them. He started messaging me, at the time when you don't want to get messages, then not stopping even if I'm not replying. Initially I didn't do anything, then I had to block that person. … Then, another old man, almost my father's age he called me taking my phone number from my father, saying my grand-daughter needs some advice. Then he started commenting on my profile picture, which I rarely

> change, since I'm on WhatsApp. Then he's sending me lewd jokes, maybe he'd not even read it, I'm not sure. I'd had enough, I blocked him. … So, I'm hidden, I'm not very much visible, things like that – it's a mixed bag.

### *Philanthropy/Altruism*

Why does one share a dog rescue video? Why does one donate to an online cause concerning the underprivileged? What about crowdsourcing to help fund a worthwhile project? These are all aspects of altruism online. At a deeper level, why do people help others? One could be the norm of reciprocity that tells us "to do unto others as you would expect them to do unto you". The other reason could be with boosting one's self-image by doing good and being acknowledged for it by oneself and by others. The third explanation is from evolutionary biology. Survival of the species implies survival of genes, which in turn implies helping people whom one shares genes with, generally in ones geographic area (Wallace, p.166). To these explanations we may add a fourth in the context of India which flows from religion, specifically Hinduism. One of the defining tenets of Hinduism is the principle of *Karma*. *Karma* is loosely interpreted by most believers as your deeds, good or bad determine the future course of your life and beyond to rebirth as well. Thus, doing good to others is like building up credit in the *karmic* bank, for the future. In this way, altruism is actually in one's self interest.

Crowdsourcing on various social media platforms, including WhatsApp, works on the principle of altruism. Prosocial behaviour can also be explained to some extent by online disinhibition. Altruistic activities such as volunteering, fundraising, crowdfunding and online support groups are prominent on the internet (Wallace, p.158).

Anecdotal evidence gathered by the authors suggests that awareness is being generated among some adults regarding the prevention of cruelty to animals or adopting pets rather than buying them from watching animal rights or animal rescue videos on social media platforms, including Facebook and WhatsApp. People in India shared widely on Facebook and WhatsApp groups missing persons' information for persons reported missing in India in 2019. Images of the floods in Kerala during the monsoon in 2019 were also widely shared across social media platforms, including Facebook and WhatsApp, which helped lead to volunteering, fundraising and other forms of support.

### *Homogenisation*

According to Navin Kumar (personal communication, 17.4.2018), media academic who researches media psychology, there is a public self and a private self. There is a gap between them so what you are actually and what

is manifest are different. Social media is magnifying this problem. It also adds to the problem of social narcissism when people are increasingly interested in projecting themselves on platforms such as Facebook, Twitter or WhatsApp. In his opinion, this is also leading to homogenisation, since certain predominant symbols prevail. Social media in his opinion is reducing diversity because of the ease with which certain ideas can be spread, often worldwide. Social media helps to spread certain ideas or messages, so certain music, dietary habits, behaviours, even courses and careers and areas of research become well known, and what gets impetus from the mass media gets importance. This dominance of certain messages, images, music etc. causes fear in the individual's mind. Examples of this are the proliferation of gyms worldwide, the spread of reverse osmosis (RO) water purification systems in India and so on. Social media has become a source of communication, which is becoming more important than mass media. Social media is important in attitude and opinion formation and behaviour management. The more you interact with a mediated environment, the more you are bound to get affected by it. Process realities are not being verified. This implies that all of a sudden a person may become a sensation on social media. People then accept this celebrity status without objectively examining whether the person is actually worthy of the adulation.

Language makes a huge difference to social interactions. To elaborate, the predominant language is an important part of the behavioural dimensions of an individual. When language is simplified and standardised as emojis, there may be some truth in this. It is worth examining whether reducing complicated social interactions to emojis may standardise responses in relationships. Is this another level of homogenisation? Kumar believes that these aspects are part of the "mechanization" of the individual, to use sociologist Anthony Gidden's phrase when he referred to the project of modernity.

> What it does is, it removes us from symbols of sensitivity, and says you enjoy it but you don't own it, you don't have a right to it, you're just a user but you're not a producer. If I sit down to make a new year card with a drawing or picture, it will take me an hour, if I start writing, it will take me even longer, you will require time, I'll have to go through the process really. The easiest is to forward a message forwarded by someone else and think you have fulfilled the norms of sociality. So those that are the actual social practices … so this how homogenisation pervades individuality.
>
> *(Kumar, 2018)*

### *Narcissism*

The young man looked into his mobile. He smiled. His reflection was recorded. A selfie for the social media world. Was there ever such a beautiful

youth he wondered? Well, that was it for today. He would take another selfie and replace his all-important display picture for his WhatsApp groups tomorrow. A modern take on the age-old Greek myth of Narcissus who fell in love with his own reflection. The term narcissism based on the traits of the legendary Greek Narcissus was the contribution of Sigmund Freud (Benvenuto, 1995). These traits include arrogance, attention seeking, desire for flattery, lack of empathy and exploitation of others. Social media seems to encourage an increasing narcissism among its frequent users, especially showing unpleasant traits such as vanity, obsession with self and lack of empathy for others. Preliminary research into the area of narcissism over time indicates that the current millennial generation is more narcissistic than the previous generation. This is also the first generation to use the internet during their formative years. While there are possible flaws with the research and caveats, the link between exposure to the Internet and increased narcissism is certainly an intriguing one (Wallace, 2016, p. 50). In an age where "selfies" are photoshopped and images online are carefully crafted, appearances seem to matter more than ever. Since the narcissists' objective is to collect a large audience of acquaintances whom they can give information to, WhatsApp may encourage such tendencies, by their becoming members of many WhatsApp groups. The display picture and status updates which are a part of WhatsApp give scope for narcissistic tendencies. Kumar (2018) believes that social media, including WhatsApp, has encouraged narcissism among people.

### *Addiction*

Excessive use of social messaging such as WhatsApp can have negative consequences such as diminished academic performance, reduced productivity, decreased communication within the family, increased distrust and jealousy, greater interpersonal conflicts and others. Some of the negative consequences of using WhatsApp have been categorised by psychiatrists as WhatsApp dependence and WhatsApp addiction. Loss of interest in the real world, loss of control, interference in everyday life and a constant dependence are some of the symptoms of WhatsApp dependence (Faye et al., 2016).

In a recent study examining the impact of instant messaging on users' daily lives, including personal, social, family and work aspects, several negative consequences emerged. Indications were that women may abuse WhatsApp more and experience a greater negative impact than men. A 27-year-old young woman was diagnosed with WhatsApp addiction and Borderline Personality Disorder in India in 2016 (Faye et al., 2016). This is possibly one of the first such cases of WhatsApp addiction recognised by psychiatrists in India. She was obsessed with WhatsApp, even answering

her messages during her household chores and during her trips to the washroom. She sometimes sent 200–300 messages per day. She used to check her messages continuously, even at night, disturbing her sleep. Interpersonal problems occurred because of the patient's obsession with WhatsApp. These are all symptomatic of any addiction. The patient was put on a regimen of medication and behavioural therapy, and psychotherapy. The patient finally was responding well on regular medication and psychotherapy for about 6 months. The onset of WhatsApp addiction generally occurs in late 20s or early 30s age group. Studies indicate that females use WhatsApp for longer periods of time than males. Psychiatrists feel that WhatsApp addiction may emerge as one of the important behavioural addictions having negative consequences in future (Faye et al., 2016). According to Professor Pratima Murthy of the National Institute for Mental Health and Neuro Sciences, NIMHANS,

> WhatsApp is something that is constantly stimulating; you are getting messages throughout the day and it's on your phone so you don't even have to log into the internet …you just need a wireless connection and you are constantly getting these messages. Especially for a person who has difficulty in exerting a degree of control, these are very easy platforms to get hooked onto.
>
> *(P. Murthy, personal communication, 1.8.2018)*

### *Disinhibition*

In analysing online interactions, various theories have been proposed. One theory suggests that people interact differently online as compared to face-to-face interactions. The online disinhibition theory suggests that social restrictions and inhibitions decrease in online interactions as compared to real-life interactions. John Suler (2004), a psychologist, suggests that there are two types of disinhibition effects: benign disinhibition and toxic disinhibition. As the term suggests, benign disinhibition pertains to people disclosing more about themselves online than they would do in real life. It also includes acts of kindness, helping others and could even include sharing positive messages or liking them. Toxic disinhibition, on the other hand, involves posts or messages or clicking sites that may be pornographic, violent, rude, abusive, spread hatred etc. This is opposed to the real-life behaviour of the individual who may not exhibit these tendencies. The dividing line between these two categories sometimes gets blurred. For example, friendly messages from acquaintances or friends may evolve into more intimate or threatening interactions, causing anxiety in the recipient. On the other hand, use of bad language may be considered tolerable among peers of a particular age or

interest group. According to Suler (2004), the reasons for disinhibition are as follows:

- *Dissociative anonymity*: This implies that anonymity "empowers" people to behave in a way online that they may not otherwise. Anonymity lets the individual compartmentalise their online activity so that it is not integrated with their offline identity. This makes it easier for the individual to not "own" their online behaviour as also to feel less vulnerable about disclosing personal information or engaging in anti-social or harmful behaviour.
- *Invisibility*: Many forms of communication are text based or based on interactions where cues such as face or voice tone or body language are not revealed. This allows for lowering of inhibitions and also of false or misrepresentations online as compared to face-to-face interactions.
- *Asynchronicity*: Many interactions online are asynchronous such as email, which is essentially comparable to a letter delivered to a person. The person then has a choice about when and whether to respond. Unlike face-to-face interactions, emails and messages allow the sender to escape the immediate consequences of the communication, thus again lowering inhibitions.
- *Solipsistic introjections*: Online interactions unlike face-to-face ones are experienced as "voices in the head". Sometimes the person interacting online may assign imaginary characteristics to the person they are interacting with, depending on their messages or posts. The online friends become inhabitants of the person's psychic world, shaped by the individual's expectations and needs.
- *Dissociative imagination*: Some people tend to see cyberspace as a make belief world where normal rules do not apply. It inculcates a sense of escapism and also the sense that by logging on, they are entering a different persona, which they leave when they log off. This leads to a sense of disinhibition.
- *Cyberspace*: This can offer a more level playing field for individuals to interact as equals in a non-hierarchical manner. Entities are shorn of their symbols of authority and trappings of office which are inescapable in face-to-face interactions. This leads to a reduction of inhibitions and interacting more as equals or peers rather than with the reverence shown to authority figures (ibid). In terms of WhatsApp interactions, many of these aspects seem to hold true.

Vigneswara (2018) feels uncomfortable with the content shared on some of his alumni groups which are male-only.

> I wouldn't say abuse, but sometimes in groups it gets too much, I exited one under-graduation group because they started sending pornographic material. In this group, it was started as a more of a co-ed group, lot more

> girls are there and boys are there. in earlier days you had serious discussions, then couple of guys started sending these sexual jokes, so women started moving out because it's demeaning lot of times. What happened after sometime when women moved out, then a lot more images started coming. I keep my phone relatively clean because I say my phone is available if my daughter wants to use it. I tell her the password and everything for my phone. So, I told this group you cannot send this kind of images because my daughter also uses and we're a working couple, there are a lot more issues are there. These guys did not want to listen so you get up in the morning and you see around 100 images or 200 images/ videos. These are really sick people. I mean we're talking about my age guys (30–40). So, I exited the group. But it's not really abuse, because I did not feel really troubled by this but exited.

Openly sending pornographic material in the Indian context has been enabled by platforms such as WhatsApp, which has happened in part due to disinhibition and claims of end-to-end encryption.

Regarding pornography, Vigneswara feels:

> There is too much circulating. If you look at pornographic material, there are multiple kind of materials. One is, a hardcore pornographic material where somebody is performing the act. Now, most of the groups, this is very less. In my group, I would say I have ten groups … rarely one or two will come into play like this and that guy says I'm sorry, it's by mistake. There are other small clippings and everything, there are lot more jokes on it – an image or a video which I can share with my wife. So that kind of content is coming in a couple of groups which is okay in a sense, we see it, immediately we delete it. As a lot more couples sit together, me, my wife, our friends sit together, we show this joke around and everything, that kind of clippings are okay. But when I start talking to my friends, they say that there are guys who store 100–200 hard core pornographic videos in their phone – which gets circulated in WhatsApp. That is a serious problem among men and especially boys.

### *The Anxiety Spiral*

The bio-circadian rhythm dictates that humans are awake in the day time and sleep at night. These natural rhythms are being disturbed by new media, and especially WhatsApp. Waiting for response or messaging at night causes anxiety, which leads to insomnia and related problems. Insomnia may lead to further checking up on WhatsApp, more messages sent etc., leading to a fresh round of anxiety and anticipation. The psychological dimensions are of always being in a race, without the individual knowing where they

are headed. People are all busy, consuming content over their devices, often becoming neglectful of their duties and relationships.

> If you go to any establishment – a hotel, a physiotherapist's waiting room, wherever – you'll find the person in charge telling the workers to keep down their phones and get to work. So actual work life is getting affected. And also get distanced from processed reality.
>
> *(Kumar, 2018)*

This endless consumption is creating a sense of directionlessness in people. Critical thinking skills are also adversely impacted. The mind never gets the rest it needs. "No time to stand and stare", as the poet of yesteryears said. Since the habit of reflection is eroded, the individual is not aware of how much time they are spending on social media and how it is impacting them.

In general, recent research suggests that increased time spent on smartphones is adversely affecting sleep patterns, relationships and cognitive processes such as attention spans, memory, self-esteem, decision-making skills etc. Increased smartphone usage is correlated with raised levels of stress hormones such as cortisol and dopamine which play a role in increased anxiety and addiction (Price, 2019). WhatsApp is one of the apps which people are using compulsively to check the next message or the next video received.

### *The Techno Self*

The question of human identity in a technological society has gained new relevance in the digital age. The identity is generally understood to be a person's sense of self. New technologies such as artificial intelligence, robotics, medical technology, ICTs and networked technologies are all changing notions of the individual and society. The term "techno self" coined by Luppiccini (2013) refers to the central issue of evolving human identity as a result of adoption of new technology. It is inclusive of aspects such as digital identity (Gellar, 2019), transhuman (McKie, 2018), homo technicus (Marcinkiewicz-Wilk, 2017), avatar etc. As such it explores the changing configurations of human technological interactions. Digital technology is helping to redefine who we are online and offline, how we interact with others, our search for meaning, how we keep ourselves busy and so on. The key question that concerns us here is how is identity formed and impacted in an age where interactions are increasingly online? How is social media and a pervasive social messaging application such as WhatsApp relevant in this regard? What is the future of the relationship between technology and identity? There are webs of relationships created from virtual life.

From entertainment, social media gradually becomes the reality of the user. Photographing food in a restaurant to upload on the Facebook Page, or sending to their WhatsApp groups is more important than eating the food.

> And becomes a part of their life – it gradually pervades and then percolates deep down and becomes a part of their identity. Then they perceive how I am being perceived by this identity of mine and this includes Facebook obviously, Instagram and this and that, it's a combination of 2-3 technological media. So, their techno-self becomes a part of their real self.
>
> *(Kumar, 2018)*

When the techno-self takes precedence over the real self, problems occur because the perception of life is not based on lived reality. When this distorted perception based on mediated reality takes centre stage, issues such as self-centredness and body image become ascendant. This is particularly true of adolescents and people with low self-esteem. Certain standards of beauty or attractiveness are set and aspired to, sometimes on a global scale. People look up to the attractive role models and so a "classification of discrimination" is established. So, a sense of vanity prevails, grandiosity and the "i-ness" increases at the cost of close bonds between friends and family. "Even mealtimes have become difficult with everyone wanting to be in their 'private zones' whether it's because of office or mobile or whatever. So, they're together and they are apart" (Kumar, personal communication, 17.4.2018).

## Conclusion

In conclusion, the different theoretical trajectories from communications, sociology and psychology have all formed the skeletal structure on which we can add the flesh of WhatsApp interactions. To summarise, many of the experts interviewed by the authors found value in WhatsApp. The "Imagined Communities" of Anderson might get reflected in WhatsApp groups, which experts believe could also include the "invented communities". Insights from the Uses and Gratifications theory also helped in understanding the usage of WhatsApp. The nuclear family groups were useful for keeping in touch in a non-intrusive way – simple things like checking the whereabouts of the family members during the day. Larger intergenerational family groups had good or bad dimensions with interconnectedness, as well as scope for miscommunication. Content circulating in intergenerational groups is different from that in groups where members are from the same generation.

According to the sociologists interviewed, WhatsApp allowed a merging of alternate generations where children can get affected by the traditional

values of grandparents. Groups on this app can be thought of as representation of a real community and are important tools for socialisation because time and distance are issues in real life, especially during the pandemic. A good analogy for messages on WhatsApp groups would be like belonging to several parallel conversations. Friends and alumni networks served some functions such as information sharing and feeling connected; however, they often became battlegrounds for opposing ideologies, leading to squabbles and exits by some of the members. The theoretical insights referred to in this chapter have informed the study of personal and professional WhatsApp group interactions in subsequent chapters.

Much research has been carried out in terms of group dynamics and the echo-chamber effect. This trend towards reduced moderate voices and extreme voices becoming more dominant is leading to polarisation. Experts believe that the more you interact with a mediated environment, the more you are bound to get affected (Kumar, 2018). Complicated social interactions getting reduced to emojis could lead to a homogenisation with standardised responses in relationships. Other problematic areas could be the increase in narcissistic tendencies, through the display pictures, status updates and selfies. When the techno-self takes precedence over the real self, problems occur because the perception of life is not based on lived reality. The Zero InBox syndrome (compulsive checking of mobiles to see no new messages are received, thus maintaining a status of zero unread messages) and other addictions are matters of concern with overuse of the app.

Experts also opine that what looks like an expansion of the public sphere in terms of access is not in terms of content, because content may be reaching the common man but that content is not democratic. Also the public sphere may not be vibrant in terms of content because most people are consuming or distributing content and relatively few people are actual content creators. One could even argue that the access it gives is antithetical to the democratic discourse.

Insights from psychology suggest that toxic disinhibition created by new media, including messaging apps, can lead to online aggression and bullying, as well as sexual or other harassment and can lead to posts that might be pornographic or violent or rude or spread hatred or be abusive, though the real-life behaviour of the individual might not exhibit these tendencies. The boundaries can get blurred very quickly with friendships turning into threatening interactions etc. But proximity and familiarity through WhatsApp can lead to liking and attraction too.

With more people preferring to communicate through images and videos and use emoticons (symbolic content), it is felt that the app is "ideologically formatted in terms of the capitalist pursuit of profit" and can be a vehicle for advertisers. Add to the mix "dumbed down" content aimed at being

consumed like an advertisement – quick, catchy, powerful – "what was originally your discourse for advertisement has become not just the discourse of the public sphere but also of your private WhatsApp group or of your political messaging" (Chaudhuri, 2018). Navin Kumar concedes that it is possible that WhatsApp has more impact as compared to other social media as there is more reciprocity in it so it will go out to a wider base. Also, there is less anonymity as compared to other social media as the phone number of the contact is revealed, along with the message.

One worrying aspect of WhatsApp is its contribution to the upsetting of the natural circadian rhythm that humans follow which dictates that we sleep at night and are awake in the day time. The endless consumption is creating a sense of directionlessness in people. Studies show that the amount of time spent chatting on WhatsApp and other social media is affecting sleep patterns, relationships and cognitive processes such as attention spans, memory, self-esteem, decision-making skills etc.

The responses of individuals who were surveyed for this research project also validated many of the socio-psychological aspects of social media referred to in this chapter. They are analysed in subsequent chapters.

Excerpts from interview with Dr. Manoj Kumar Sharma, Professor of Clinical Psychology, National Institute of Mental Health and Neurosciences, Bengaluru (personal communication, 3.8.2018).

*Q:* What is the Service for Healthy Use of Technology (SHUT) Clinic about?

*A:* The centre promotes healthy use of technology and I have been working in this area from 2009 onwards. It was the first such centre and we started it initially as an exploration of internet use to assess what is the pattern, the reasons and other issues. We found that excessive use of internet also happens as an association with psychological distress when people use an online platform, whether it is internet, YouTube, WhatsApp texting, etc. as a matter of mood elevator. So, because it makes them feel good, they would like to be responded to as possible. This also happens with texting. If you get an SMS, any text, most of the people reply in five minutes or less. Same for WhatsApp. The need for affiliation, it was there in the offline world earlier. Now WhatsApp was the obvious online platform. So then in the first instance there is excessive use of social media. There is a study linking use of social media with social capital assessment, so there we found it has shown a decline that they have more online capital rather than offline.

*Q:* If you look at the social media platforms WhatsApp is a little different because it's a messaging platform, the frequency of interaction is greater, the

feeling of intimacy is greater and with groups also. Would you say that this is more addictive than the others?

*A:* I would say so, because in terms of degree of use then definitely we are using WhatsApp more frequently, and people are moving towards WhatsApp and Instagram rather than other platforms. That change has been seen because it is quite like a craving/addiction. Just like alcohol addiction when people want to have alcohol at night, we see our last WhatsApp message before we go to sleep and immediately after getting up. There is a loss of control which we seen in addiction, people spending quite a significant amount of time on messages.

*Q:* WhatsApp is a useful coordination tool and it becomes difficult to switch off from it.

*A:* True. Basically, utility is one side but some people keep using it recurrently, for example, we got one case where the patient used to see WhatsApp 40 times in 15 minutes every day. So if you are checking too frequently and a significant amount of your productive time goes in responding, then we say it is an addiction. If we can acknowledge and make some rules for our self like check once in 10 minutes, 15 minutes you will remain productive. However, we need more qualitative data as there is a very thin line between addiction to WhatsApp and excessive use.

*Q:* What are the main signs of being addicted to your phone or the internet?

*A:* The first is craving, craving to be online, which could be social media, which could be gaming, and it could be WhatsApp, it could be texting. One case report we published where the patient used to text almost 300 messages per day. She showed a decline in academics, disturbance in communication with parents, and became more solitary in her lifestyle.

*Q:* Do you see any difference in urban and rural environments when it comes to the internet and if so, do you think literacy is a factor?

*A:* There is not much research on the subject. There could be a difference in the mode of use in urban and rural settings, the way they use the internet is different. Children who are gamers however are not really hampered by literacy, across social strata. However, I would have to look at my data before commenting on this question.

*Q:* What is the disinhibition effect and how does it happen in WhatsApp?

*A:* People feel safe to communicate online, and they feel accountability can easily be denied. They can easily say that it was not intentional. They feel that denial may not lead to some significant effects on their circumstances as it happens in face-to-face communication. They can easily log out, if the other person starts questioning, and they have a lot of modalities to guard their self-esteem which is not available offline. Secondly,

people find more freedom in expression online, than in offline communication. Third is the novelty itself and it gives them psychological satisfaction.

*Q:* Do you think the medium itself changes the way people behave or is the medium allowing their original nature or character to emerge?

*A:* Both things can happen. Earlier alcohol and drugs were taken to allow disinhibition, so the medium itself provides them an avenue to express themselves. Or it could be a part of their personality which is pushing them to choose a modality which can match their expectation and which can satisfy some underlying need. Nowadays sexting is common on WhatsApp. Sometimes it's between two friends, but sometimes it is one person sexting another who is not willing to accept it, and that becomes harassment. Empirically we have some data on sexting, but overall in terms of personality also, we have found some data that neuroticism and people who are anxious, indulge in it.

*Q:* Do you think social media overall is making people more anxious because we are either waiting for a message or waiting for a response, and do you think it has increased anxiety level?

*A:* I would go with the broad notion that there is a bidirectional relationship between online platforms and psychological issues. Sometimes because of online platforms we develop anticipatory expectation that some message is going to come. That anticipatory expectation may manifest in some of the cases because of their personality, because of their psychological profile as anxiety. Or it could be because people have primary anxiety as a problem and they are using social media online platforms to manage their anxiety. If you already have some psychological issues like anxiety, it could exaggerate the problem. We found in one case that a boy was having social anxiety, and he did not have many friends as he had a lot of anxiety issues in offline relationships. He moved to online relationship on Facebook or social media so that he can easily work on his anxiety. This whole area requires careful delineation whether social media itself is making people anxious, or they are using social media as a means of coping.

*Q:* Do you think with selfies etc coming in, we are becoming more narcissistic?

*A:* One characteristic of selfies goes along with narcissism as people want to portray themselves and taking selfies improves their self-image and self-esteem with good feedback from others. But all this somewhere exaggerates, working on enhancing one's self, which is narcissism also. We may say at this moment that it does, but it is my limitation in having only one study where we found that selfie as a manifestation of body dismorphic disorder where a person has a lot of anxiety about her body and she

started anxiety as a behaviour effect. If I would say that in that context, then definitely your question stands.

*Q:* Do you think WhatsApp is creating identity problems among users?

*A:* Yes, definitely. Now online identity issues are coming up but in the long run how much it is going to affect, we still have to see. I think people with anxiety having fake identity are chatting or doing other things online and they feel okay, that it is making them feel good. That nobody knows about their anxiety and they can easily tell others also that it is not so. But in the long term, some trends we have seen, it definitely has an impact on individual psychological health if they are in a relationship, it has impact on the relationship. But long-term effects we still have to see.

*Q:* There is a trend of sharing violent sexual content on WhatsApp. For example, real rape video footage is being circulated on WhatsApp in some small towns in UP and people are even purchasing it and circulating among their friends. Why do people buy such sexual and violent content?

*A:* One thing is, like most WhatsApp users have a habit to forward the message, to let others know. So it may be a group impact like we forward to our friends and they forward to others because sometimes they want to highlight that some problem is coming up that is normal. Second it's a matter of the receiver also, who is going to receive those messages. So it's a matter of the receiver characteristic also because the whole message may go to a number of people but some will take it in a different way and they influence others also. Those people who get influenced, again their psychological profile is such that they can be easily influenced by anybody who tells them in an effective manner. That's how a lot of nuisance is created. One aspect is pleasure derived from the viewing of such content; the second is the person's ability to empathise that this could happen to me also, as a victim. So it could be aggression, or it could be pleasure or there may be another group of people who feel that they may empathise with the victim. But what is required is more awareness in society on how to tackle these messages and how to block it further.

*Q:* Do you think socializing on groups in WhatsApp is similar to socializing in real life? Increasingly people are only interacting on WhatsApp and no longer taking out time to meet each other.

*A:* Earlier we used to manage social life offline but now people are using online platforms. That it is happening predominantly on online platforms is also good in a way, but if that is happening too frequently, this leads to disturbance in bonding because you are always available on texting, but you have not seen that person, or that family member for long. But

research-wise, we have seen use of more online platforms for making connections leads to decrease in the feeling of well-being.

*Q:* Do you feel gender is a factor in the way people are using this online platform? Are women more scared to put up their pictures etc or things like that?

*A:* Yes, we found that. Women have better control. We still don't have enough data but I think women are more conscious of about what they want to put on social media in comparison to men.

*Q:* Do you think in the hierarchy of needs, interacting on WhatsApp is important?

*A:* I think so. People are interacting and they have said it has become a necessity now that every five minutes they have to check their WhatsApp and other things to remain connected and to feel good. What we have found is every five minutes we check WhatsApp at least two times. People do feel good after chatting and all.

*Q:* The immense popularity of WhatsApp in India, what can explain this in terms of psychology?

*A:* I think psychology wise I would say it provides a platform to get connected. And somewhere the need for affiliation, need for approval, need for recognition also gets served through WhatsApp. But these are clinical experiences. We don't have much empirical data in this regard.

*Q:* Do you think WhatsApp forwards help in changing people's minds?

*A:* I think now users are quite conscious, they get a lot of information from other platforms too. But repeatedly if you get a message, definitely I think the frequency and repetition is happening, either people will like to know more about it. In case they do not have a tendency to seek more information, it may influence their opinion also.

*Q:* What are the withdrawal symptoms of digital addiction, are they like substance abuse?

*A:* No, that's different. Substance abuse withdrawal symptoms include physical ones also whereas here it's more psychological. It's a craving, those experiencing withdrawal will feel slight change in mood, the feeling of well-being will not come, people feel anxious, they feel irritable. So depending on your usage and control, you will manifest other psychological withdrawals. One should do once a week "internet fasting" to manage internet addiction.

## Note

1 Anecdotal evidence gathered by the authors over a four-year period (2018–2022) included data collection from extended family, friends, colleagues and a few published sources.

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# 3

# HELLO WHATSAPP

## Connecting Friends and Family

> *In late January 2018, Indians woke up to the news that their use of WhatsApp is affecting the internet worldwide, clogging it up for some time every morning Indian Standard Time (IST). The culprit – Good Morning messages being sent across WhatsApp in India. It did not come as a surprise to most Indians as they were struggling to cope with this flood of messages in their personal groups and some in their professional groups too. Most Good Morning messages were accompanied by pictures or videos with some cheery/elevating/inspirational/religious text and even the phones were finding it difficult to store and display these messages. The New York Post describes these Good Morning messages as "an abundance of sun-kissed flowers, adorable toddlers, birds and sunsets sent first thing in the morning". Thanks to this phenomenon, the internet bandwidth was getting clogged from just before sunrise, up to 8 a.m. IST. The article goes on to say that even the Indian Prime Minister likes to send Good Morning wishes to his colleagues and once made public that he was not happy at the lack of response from a group of lawmakers to his greetings. To give the issue context, it was reported that WhatsApp users in India ushered in 2018 with a record 20 billion messages.* (Purnell, 2018)

### Situating Personal Messaging

The popularity of good morning messages has led to their semiotic poaching for messaging with some agenda, as done by @sodonechilling on Instagram, which has been "creating and curating WhatsApp forwards … that have

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the pastiche of the ones regularly circulated on family groups, except with a twist" (Desai, 2020). The group behind it calls themselves "the new WhatsApp University" and says, "It's just one way of infiltrating a space that is full of bigotry and misinformation" using a familiar "format and aesthetic".

O'Hara et al. (2014) presented a view of the popularity of WhatsApp and other messaging platforms going beyond economic and functional reasons, which they claimed were not sufficient by themselves. They believed that use of WhatsApp was "constitutive of a felt-life of being together with those close by", and that this was built through "small, continuous traces of narrative, of tellings and tidbits, noticings and thoughts, shared images and lingering pauses; … constitutive of dwelling". Their argument was that "WhatsApp is used by our participants as a key component of their way of dwelling with others". In a personal interview with the authors, sociologist Prof Susan Vishwanthan also iterated that a "WhatsApp group is a representation of a real community". A year later, Montag et al. (2015) discussed the kinds of personalities and their usage of WhatsApp and suggested that "extraversion is of high importance in understanding WhatsApp usage". The article suggested that the usage of WhatsApp was relatively higher among extroverts as they were likely to be more social and have a positive attitude to the app. Also, "conscientiousness was inversely related with WhatsApp usage" as such individuals are more likely to "handle digital consumption better" and less likely to get addicted. Another study by Suefert et al. (2016) that looks at group chatting in WhatsApp comes to "the conclusion that most group chats consist of active, dominating and several passive members", where the active members keep sending messages and the passive ones only read. All these studies tie-up with the psychological and sociological dimensions of WhatsApp discussed in the previous chapter, which are illustrated in the survey findings about personal chats, coupled with some interesting insights. As far as addiction to digital media is concerned, Professor Pratima Murthy of the National Institute of Mental Health and Neurosciences (NIMHANS) says, the fear of missing out is a big factor in why youngsters get addicted to messaging platforms like WhatsApp.

> There is this sense of missing out in the world, missing opportunity, missing a friendship. So, there is immense pressure actually to respond. With young people, there is this feeling of the world at your fingertips, you can have it or lose your entire section of friends, contacts.
>
> *(P. Murthy. personal communication, 1.8.2018)*

## About the Survey

In the chapter on theoretical underpinnings of the use of social media, including WhatsApp, the issues of aggression/cyberbullying, attraction/

intimacy, philanthropy/altruism, homogenisation, narcissism, addiction, disinhibition, the anxiety spiral, the techo-self etc. have been explored. However, given the authors' limited resources in the absence of funding, this survey looked at only a few aspects to the psychological impact of usage of WhatsApp. The main questions related to the reasons for use of WhatsApp, the perceived time spend on it, how WhatsApp usage ranks in comparison with other social media apps, the features most used by respondents, preferred content, the problems faced in using the app, questions related to fake news and propaganda, use of WhatsApp for business, preferred emojis and overall experience with WhatsApp.

The survey for understanding the use of WhatsApp was conducted in 2018. It was based on convenience sampling and had a sample size of 205. The categories of those surveyed mainly included Indian nationals who have been categorised based on vocation. A separate category of foreigners temporarily in India was also looked at. The foreigners stationed in India temporarily were all based in Delhi but are also not shown in the following graph which features Indians only. The armed forces personnel who responded numbered 12 and are not included in the following graph as most had not mentioned their locations in the questionnaire.

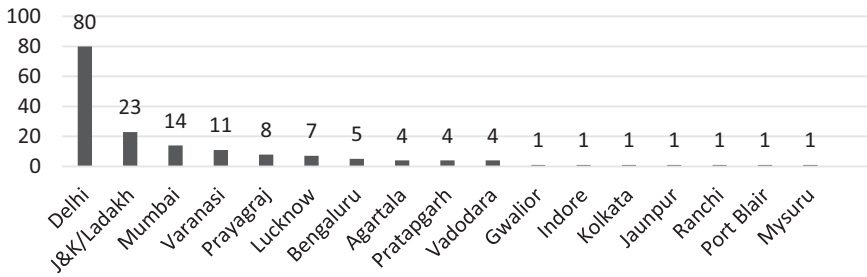


**FIGURE 3.1** Number of Respondents Location-wise.

*Source:* Created by authors from survey

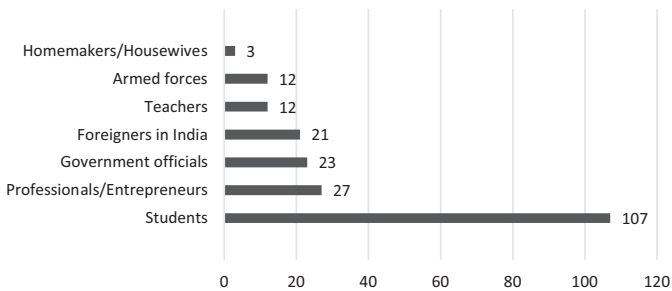


**FIGURE 3.2** Category-wise Distribution of Respondents.

*Source:* Created by authors from survey

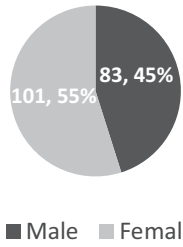


**FIGURE 3.3** Overall Gender Ratio of Respondents from India (Foreigners Temporarily in India Not Included).

*Source:* Created by authors from survey

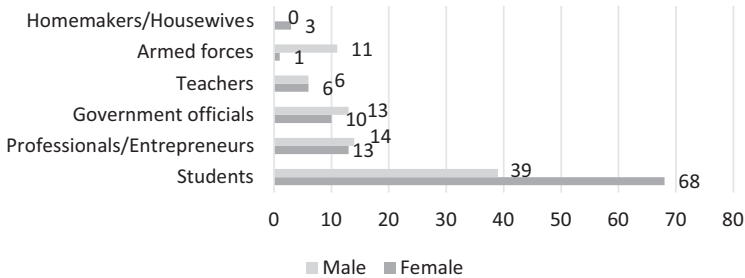


**FIGURE 3.4** Gender Ratio within Categories for Indian Respondents.

*Source:* Created by authors from survey

### Survey Findings: Category-wise

I. ***Students***

The students who responded to the survey questionnaire were all from the northern part of India, including the two metros of Delhi (65) and Mumbai (1), and the conflict-prone area of Jammu and Kashmir and Ladakh (23). The three big cities from the Hindi heartland – Varanasi (6), Lucknow (5) and Prayagraj (4) – also saw some response, while students from smaller cities like Jaunpur (1) and Pratapgarh (2) responded in a small way.

More women students responded, as compared to men, forming nearly 64% of the sample.

(a) **Reasons for Use**

The top reason for most students for using WhatsApp seemed to be for keeping up with class-related information, which, they said, was nearly impossible

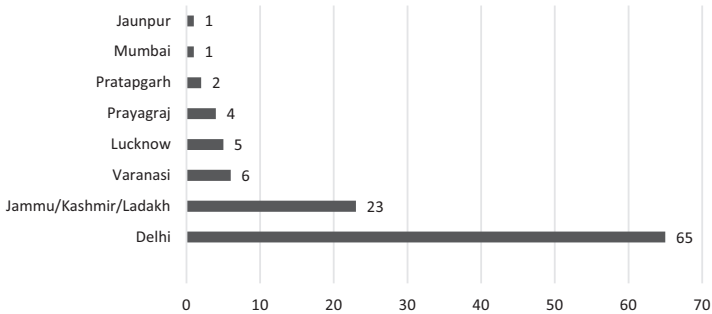


**FIGURE 3.5** Representing the Geographical Spread of Student Respondents.

*Source:* Created by authors from survey

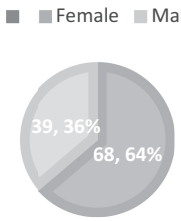


**FIGURE 3.6** Gender-wise Distribution of Student Respondents.

*Source:* Created by authors from survey

without being part of the class WhatsApp group. Whether it was Manoj, 26, a research scholar at Banaras Hindu University in Varanasi, who said he liked to receive "shaikshanik soochnaayein" (educational information) on WhatsApp, or Yamini (name changed), 21, from Delhi, who said she uses WhatsApp "for formal information about classes in universities and elsewhere", a major reason for usage of the app was for this. In fact, Kamala (name changed), a Delhi student says, "I was off WhatsApp for a year. … Have joined it again solely for college and professional purposes". Utkarsh Malviya, 16, from Prayagraj says, WhatsApp "is one of the most useful applications … it also helps in exchanging knowledge".

Of course, WhatsApp also helped students to "keep in touch with people who matter", as Jaya, 24, a student from Delhi and a writer, said. Bandita, 22, says she uses it "to connect with family who live 2,000 kms away, back in Assam". Location-sharing was mentioned by some youngsters as a popular feature of WhatsApp. Tulika (name changed), student, 22, based in Delhi, says she likes the recent "delete post" feature of WhatsApp.

Among other uses of the platform among students are subscription services. A 22-year-old Delhi student, Jasmeet (name changed) elaborates that

she has "subscribed to digital news platforms like *Newslaundry* and *The Quint*, which send news as WhatsApp messages". For journalists another WhatsApp service called *News Buzz* is popular, which gives them updates about happenings (more about *News Buzz* in the chapter on business). Ruhamita says she also likes "exchanging quotes or snippets from my favourite books with friends".

(b) **Preferred Content**

Most students say they prefer educational content over any other. The overarching sentiment across categories was of course that they use WhatsApp to keep in touch with their family and friends. However, for students, WhatsApp in particular seemed to be a necessity for educational purposes.

(c) **Ranking of the Necessities of Life**

The survey asked students how they would rank the following necessities in order of preference: (a) mobile phones, (b) cheap transport, (c) affordable food, (d) clean air and (e) clean water. For most students, mobile phones were ranked higher than cheap transport as a necessity after clean air, clean water, affordable food by a good number of respondents, some going as far as ranking it at number 3, even higher than affordable food (Kritika, 21 and Swati, 21). Ratnesh, 30, a research scholar in Banaras, also placed mobile phones above cheap transport among his choices. Nitika (name changed), 16, from Pratapgarh, says mobile phones are a bigger necessity than cheap transport for her too. For Apurba Banerjee from Delhi's JNU, more than clean water, cheap transport and affordable food, life necessities rank mobile phones at number 2, just below clean air. This survey was conducted before the Covid-19 pandemic spread to India.

(d) **Problems with Usage**

To the question about facing problems because of using WhatsApp, Mallika Dutta, 20, a Delhi student, said she "avoids using WhatsApp on days when I'm not feeling too great emotionally as it leads to more addiction on social media". Addiction is a problem enumerated by some in our survey.

Ananya, 21, a student at Delhi, says, "It has happened quite a few times that people have got my number and then sent me inappropriate messages; even after you block them they will start with another number". Another student, Yamini (name changed), says she has faced problems like "unknown numbers randomly messaging, creepy texts from unknown people, lewd messages".

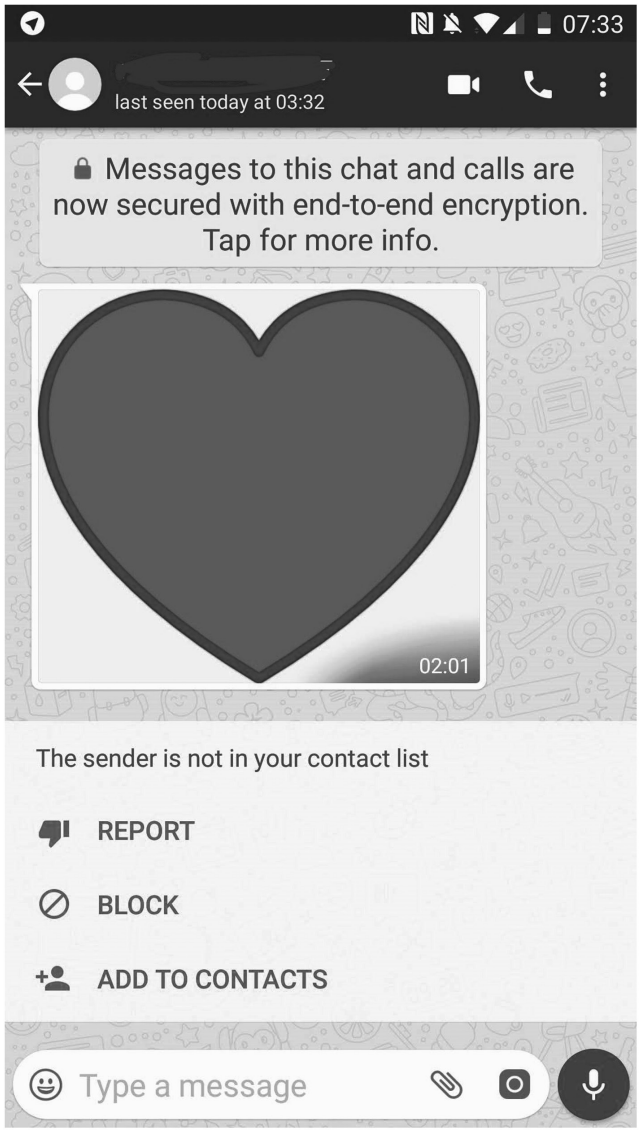
07:33
last seen today at 03:32
Messages to this chat and calls are now secured with end-to-end encryption. Tap for more info.
02:01
The sender is not in your contact list
REPORT
BLOCK
ADD TO CONTACTS
Type a message

**FIGURE 3.7** Screenshot of Unwanted Messaging from Unknown Number.

*Source:* Screenshot from authors

Jasmeet (name changed) says her big problem with the app is that her "photo gallery is flooded with 'good morning' pictures which are of no use to me, it drains my energy and wastes my time to delete all the irrelevant media from my phone on a daily basis and also leads to storage paucity".

Ankita Soni says her problem with WhatsApp is that "sometimes you have to chat to people or groups even if you want to ignore them".

Suyasha Sawhney, 21, has a different problem with WhatsApp because she finds she has developed a "short attention span because of the constant notifications, I tend to lose concentration". Yet she feels "handicapped" if WhatsApp stops functioning. Similarly, Adya Rajshri (21, Delhi student) says, "Since WhatsApp makes connecting work colleagues easy, it is tough to turn off from work/college mode even during weekends". So, switching off from the app is difficult. Some other problems listed by Shreeya Upadhyay (21, Delhi student) are: "profile pics being saved by other people; people knowing when I am online and have read messages; poor grammar; addiction, insomnia; less concentration on studies".

Like Shreeya Upadhyay in Delhi, Kalyani Maurya, 24, in Varanasi has also had the unpleasant experience of "*WhatsApp par hamare dwara lagayi gayi profile picture ko logon dwara upload karlena*" (translation: people having uploaded the picture she has used as her profile picture on WhatsApp).

The survey clearly hints at how WhatsApp is impacting students negatively with problems of addiction, attention deficit, as mentioned in the chapter on psychological issues with usage of WhatsApp. The feeling of not entirely being safe through identity theft and stalking as well as misuse of personal data are also some areas of concern.

Professor of Psychiatry and Head of the Centre for Addiction Medicine in NIMHANS, Dr. Pratima Murthy shared some insights about digital addiction, which is different from substance abuse and falls under behavioural addiction, though symptoms of both are "practically identical" (P. Murthy, personal communication, 1.8.2018). Talking about digital addiction, she says,

> the important thing is about control. You decide to use it (digital media) for a certain amount of time and then you are not able to do that and you end up spending time on the net to the exclusion of other activities.

She says social withdrawal is one symptom that indicates problematic usage of digital media via the phone. Becoming reclusive and neglecting other aspects of life are red flags as far as accessing digital media on the phone are concerned. "Adults have definitely more responsibility in setting standards" for youngsters, she feels as they are role models for children. Dr. Murthy believes that children must be taught how to use mobiles in a safe manner and "have other activities – adequate physical activities, adequate mind stimulation activities, adequate relaxing activities, adequate stimulating activities". Given the rising cases of pathological gaming, sexual addictions, pornographic addictions,

shopping addictions etc., she says it would be a good idea to "self-regulate" usage of digital media like not looking at the phone for at least 90 minutes after waking up and limiting use to say 30 minutes in a day, because not everything is "so vital" or "very urgent and immediate".

### (e) **Duration of Usage**

Self-reporting is one of the key ways of measuring social media usage in surveys though we cannot deny that the method is flawed. However, our survey, based on self-reporting, does give us an insight on how much time users *think* they spend on the platform.

From our survey we can see that most students say they check their WhatsApp messages "several times a day", a common response being – "whenever I get a message".

The picture that emerges from the survey is of one kind of student who may be termed "a heavy user", who acknowledges spending over 6 hours on the phone and checks for updates every few minutes. And then there is the other kind of student who believes s/he is very much in control, spending less than 2 hours, but checking her WhatsApp updates frequently.

Interestingly, the habit of incessantly checking notifications and clearing every inbox now has a name: the *Zero Inbox Syndrome*. In an article in the *Hindustan Times* on 8 December 2019, Dr. Manoj Sharma of The SHUT Clinic at the National Institute of Mental Health and Neurosciences (NIMHANS), which helps detox from digital addictions, says this syndrome makes people pick up the phone every few minutes to check for notifications, "almost as a reflex". The clinic has Service for Healthy Use of Technology and SHUT is the acronym it goes by (M. Sharma, personal communication, 3.8.2018).

### (f) **Use of Emoticons/Emojis**

Students overall seemed to be fond of using emoticons – the popularity explained as emoticons "sometimes substitute words" (Shikhar (name changed), 20, student). Jatin, 22, says he uses emoticons because "sometimes words can be misinterpreted by the receiver", implying that emoticons convey the non-textual input into a conversation.

Emoticons could also be used as a shortcut, explains Kritika (name changed), student, 22, "as emoticons replace words when one is not in the mood to write". Jaya, 24, gives the following reasons for using emoticons: "On occasions of being at a loss for a response, out of courtesy; and on occasions I mean to emphasise an emotion".

On appropriate use of emoticons, a student, 22, says her usage of emoticons "completely depends on the person – I use a lot of emoticons with my family and best friend. Professionally, not at all" (Kamala (name changed), 22).

Adya Rajshri, 21, has this unique point of view saying "emoticons allow conversations to end".

The most popular emoji was the smiley.

To the question on which other emoticons are needed, Rahul Kanade, 20, a student in Mumbai, says he would welcome emojis for "busy at work" and "Do Not Disturb, DND" to be added to WhatsApp.

In a review of the book *The Semiotics of Emoji: The Rise of Visual Language in the Age of the Internet* (Danesi, 2016), considered a seminal work on the subject, Kerslake and Wegerif (2017) conclude that emojis "add emotion to digital communication", adding a "positive tone" and "fun" to it. In lieu of face-to-face communication, emojis come bearing the gift of "guiding interpretation" to digital communication. The students' usage exemplifies this amply. The reviewers also agree with Danesi's conclusion that the "adaptability of human communication is likely to prevail" and that technological developments will probably decide how far emojis will continue.

### (g) **Favourite Features on WhatsApp**

"Chatting", or multimedia texting, emerged as the favourite feature among students. Audio/video calling, especially in areas where mobile networks are not strong, are favoured next.

### (h) **Reaction to WhatsApp Outage**

When asked how they would feel if they could not access WhatsApp, students said they would feel "terrible and anxious" or "disconnected from the world" or "paralysed" or as though their "world comes to a standstill", as well as "a little handicapped and also (suffering) FOMO – Fear of Missing Out" or "bored, restless". Some however felt that such an outage would make them feel that "life's at peace! Without any obligation to check whether there is any important message between the forwarded messages", and "relieved" or "happy and relaxed".

In all, only 25 Delhi students said WhatsApp was their most preferred app, the remaining 40 counted it as their second, third or fourth choice out of five choices given in the survey. But nearly all of them said they used WhatsApp to keep in touch with family and friends. It must be borne in mind that this survey was conducted in 2018 when the total number of users in WhatsApp was around 300 million monthly active users as per Statista. Anecdotal evidence suggests in 2021 that WhatsApp is being used by students as an adjunct to

their educational activities and online classes but many of the urban students prefer Instagram for self-expression.

The case of students from the Union Territories of Jammu & Kashmir and Ladakh seemed a little different, with most students expressing apprehensions about the way WhatsApp was being used for spreading propaganda in the area which has been a conflict zone, bordering Pakistan and China. Most students said though WhatsApp is their preferred app to stay connected with family and friends, the content "should be real and does not contain any fake news or propaganda". Messages like "*Good Morning*, good evening and suprabhat" and chain messages irritated most users. A number of users spoke of trust issues with messages received via WhatsApp.

## II. *Government Officials*

Of the government officials surveyed, six were from Delhi, four from Patna, four from Bengaluru, two each from Mumbai and Lucknow, one each from Kolkata, Mysuru, Port Blair, Agartala and Prayagraj.

The gender ratio skew was not too much in this sector – 10 women to 13 men.

### (a) **Reason for Use**

WhatsApp is the preferred platform for professional interactions for government officials. Most preferred it over Facebook, Twitter, Instagram and LinkedIn. Most officials said they use WhatsApp for "communication, office work, entertainment, chatting, sending and receiving photos, videos and documents". As the officials interviewed were mostly working in the field of media and communication, some of them said they are part of media groups to follow news and current affairs.

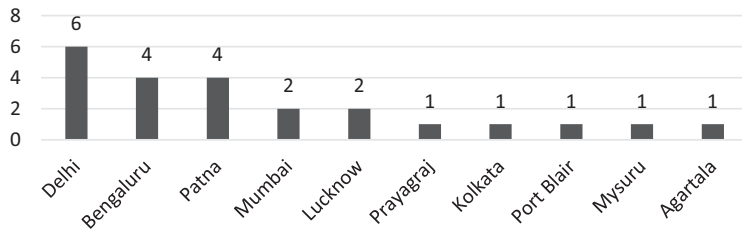


**FIGURE 3.8** Representing the Geographical Spread of Government-sector Respondents.

*Source:* Authors' survey

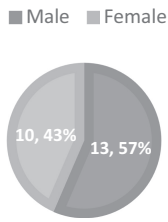


**FIGURE 3.9** Gender-wise Distribution of Government-sector Respondents.

*Source:* Authors' survey

Most felt families have been "brought closer (by WhatsApp). Sometimes, it has filled the gap for not writing letters".

(b) **Ranking of the Necessities of Life**

All of the government officials were clear that mobile phones rank low among life's necessities, when compared with clean air, clean water, affordable food and cheap transport. Some have, however, placed them above cheap transport.

(c) **Preferred Content**

Most officials preferred "news, entertainment and chatting" through the app. Annoying messages included the ubiquitous "Good Morning" and chain messages. A forwarded message that Latha (name changed) appreciated was the one about a car accident that happened in a lonely spot, but once the photo of the accident was circulated on WhatsApp, a number of people came forward to help. She and another officer also mention the "Coorg rains and flood havoc",[1] where people came forward to help after messages seen on WhatsApp (G.J).

(d) **Problems with Usage**

Latha (name changed) worries that "youngsters are engaged in mobile chats in public places on roads, ignoring safety and many a times lose the opportunity to see this beautiful world live, serve the needy". Gowda believes WhatsApp has not made much of a difference to his professional life and has "hindered personal attachment" in his personal life. Jane Namchu says, "What I don't like is forwards which make no sense, like chain letters". She also finds WhatsApp "at times too intrusive". Poornima says "Greetings and wishes on daily basis/religious notions" annoy her. Nilesh deletes "heavy

photos and videos without watching" ("heavy" as in large files) as they clog up phone memory.

(e) **Duration of Use**

Those from the government sector estimated that they spent the least amount of time on WhatsApp as compared to the other respondents. Most believed their usage to be less than an hour every day.

(f) **Use of Emojis**

Among the favoured emojis were the "face with tears of joy", smiley and thumbs up as also folded hands emoji.

(g) **Favourite Features**

Some officers used WhatsApp "like an audio/video phone for communication". But WhatsApp was mostly used for texting, exchanging photos, information, by officials.

Overall, Shyamala says that WhatsApp has brought about "a communication revolution", Mamta calls the app the "new generation postman", Swati (name changed) describes it as "easy and fast connect" and Anupama says it is "convenient, but use carefully". However, the last word goes to Manish, who describes it in terms of Idea (now Vodafone) Cellular's iconic advertisement, thus – "Text, photo, phone, voice call, video call, Broadcast all rolled in One. What a Super Idea Sir Jee Madam Jee !!!"

III. *Teachers*

Of the teachers who responded, the maximum number were from Varanasi (4), followed by Delhi (3) and one each from Hyderabad, Indore, Mumbai, Vadodara and Ranchi. Both genders were equally represented.

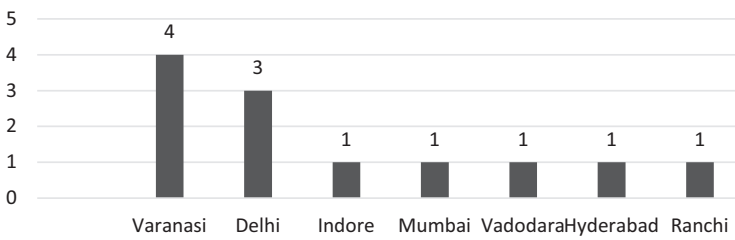


**FIGURE 3.10** Representing the Geographical Spread of Teacher Respondents.

*Source:* Authors' survey

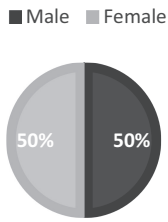


**FIGURE 3.11** Gender-wise Distribution of Teacher Respondents.

*Source:* Authors' survey

Two of the three teachers surveyed for this book in Delhi, who are employed at one of the leading schools, were emphatic that WhatsApp has made their professional lives worse. Though Jahnavi (name changed), 40, said her favourite communication platform is WhatsApp, she believes "it has led to blurring of professional and personal life. Intrusive". Lakshmi (name changed), 31, bemoans that "official messages are sent through WhatsApp. It is annoying and an intrusion in personal space and time". She goes on to say that "WhatsApp has allowed for constant availability for work and thus has blurred boundaries". Asked to describe the app in one phrase or sentence, Jahnavi (name changed) calls it a "necessary evil", while Lakshmi (name changed) calls it "ANNOYING". Overall, teachers in Delhi seemed to be spending quite a lot of time on WhatsApp and were not happy with the app causing them to constantly check their messages.

Anecdotal evidence suggests the Covid-19 pandemic and online classes, thanks to that, has made teaching very challenging as a profession. Numerous teachers, in conversation with the authors, have described their struggle to use WhatsApp for classes in school and have also had a tough time being in WhatsApp groups with parents of students, calling parents "aggressive", "bullying" and "egotistic" in their interactions with them.

### (a) **Reasons for Use**

Like the other categories, WhatsApp is used by teachers for "sending text, audio, video and video calling". Jahnavi (name changed) likes text the best as she "can connect/communicate with people without calling them". In Varanasi, Ashish Tripathi says WhatsApp is a "*samoohik aur niji samvaad ka behtar maadhyam hai*" (translation: better media for group and personal chats).

### (b) **Duration of Use**

Most teachers' estimation of the duration of using WhatsApp varies between 1 and 4 hours. However, teachers like Lakshmi feel overwhelmed with

WhatsApp messages and estimate they spend "20 hours approximately" daily on WhatsApp, while Jahnavi (name changed) estimates she spends 4–5 hours on it and Bela (name changed) believes she spends "10 hours" on the app, checking for messages 40–50 times in a day.

(c) **Preferred Content**

Dinesh Ojha mentioned a forwarded message that inspired him and made him feel happy it was a video which showed "a man acting as a stepping stone by kneeling and clinging (*sic*) both hands to support so that a few women can get down from a boat during recent Kerala floods". This was a clip that went viral and found its way into WhatsApp in December 2018.[2]

(d) **Problems with Usage**

Ashish Tripathi says that sometimes "*Jaldbaazi mein poori baat spasht na likh paane par galatfahmiyan paida huyi hain*" (translation: there have been misunderstandings when in a hurry the entire message has not been written clearly). Ojha gives the example of a message received from a colleague about a newspaper headline which called upon universities to celebrate the anniversary of the "surgical strikes" against Pakistan as a message that annoyed him.[3] Dimple says she does not "like reading moral science lectures/instructions or medical awareness messages on the app". Talking about unpleasant encounters, Niyati also says it's a scary thought to know that anyone can take a screenshot of your DP (display picture) and circulate it. This was brought home to her when her local vegetable vendor remarked that she has a very cute daughter.

(e) **Use of Emojis**

At least one teacher said he did not know what an emoji was. Others said they liked to use the folded hand emoji for *pranam/maafi* (greeting/apology). Others named the smiley and thumbs up emojis as their favourite.

(f) **Favourite Features**

Texting and the option of audio and video calling are among their favourite features. Lakshmi (name changed) says she likes "the option to delete response for everyone".

Giving voice to what a lot of teachers experience (anecdotal evidence and from the survey), Niyati describes her interactions on WhatsApp in professional settings thus:

> I use it to exchange information about meeting times, events, classes and also to send documents/scans in PDF format. We also have groups at my workplace. For example, a group for all teachers in the department, one at the faculty level where I have been assigned duty, one at the university level as I was a member of a committee in charge of an event. It helps coordinate meetings and plan activities. However, it becomes irritating when some on the work group send irrelevant forwards or *Good Morning* quotes.

In some ways she feels that life before WhatsApp was better

> because then there was a certain time for a given task or activity. For example, these days the younger generation of students does not hesitate in sending across a message/forward to teachers at any time of the day. It is also a nuisance when you don't need to be contacted by students for silly queries that can be brought up in class or in meetings but are sent through WhatsApp. It is as if we are available to them 24–7. This is also true for other work-related groups where there is activity even after work hours!

## IV. *Professionals/Entrepreneurs*

Professionals working in the corporate sector and entrepreneurs surveyed were geographically from the northern part of India, with Mumbai being the financial capital of the country, predictably having the most (10). Five respondents were from Delhi, three from Agartala in the distant northeast, two from Vadodara, Prayagraj and Pratapgarh each, while one each from Varanasi, Bengaluru and Gwalior were surveyed. The gender distribution was roughly equal, with 14 men and 13 women filling in the authors' survey.

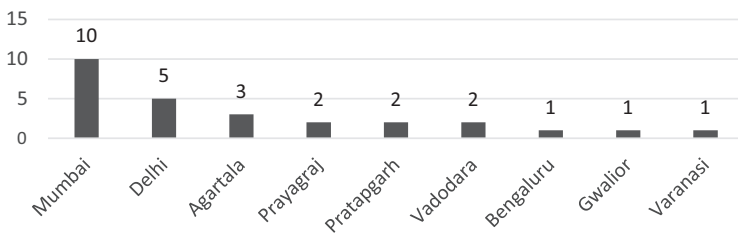


**FIGURE 3.12** Representing the Geographical Spread of Professional/Entrepreneur Respondents.

*Source:* Authors' survey

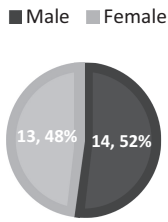


**FIGURE 3.13** Gender-wise Distribution of Professional/Entrepreneur Respondents.
*Source:* Authors' survey

(a) **Reasons for Use**

Husband–wife duo Rina and Rajeev are partners at a brand management agency who use WhatsApp for "work-related communication with clients/vendors" as also "light-hearted entertainment with jokes and silly forwards" and for "general time-pass". For them, WhatsApp's ability to "make calls when telephone networks don't work" is a huge plus. Also, it helps as there are "professional groups too where matters of common interest get discussed". Vipul, 42, uses WhatsApp for (1) RWA (Residents' Welfare Association) information, (2) social connectivity, (3) business reporting and (4) client relations. (A detailed interview with his team can be found in the chapter on use of WhatsApp for professional purposes.) He uses the app for professional work because of its "ability to broadcast to a large audience and the feature to know whether the message has been checked …. There were other ways to disseminate and collect info. However, WhatsApp is just a better version of the tools". Alpana, in her late fifties, is a professional based in Canada but spends over three months in Delhi annually. She thinks WhatsApp "is a good option for teams working on specific projects and can save time otherwise spent in sending numerous emails". Ria, 23, says WhatsApp is her favourite app. On her experience with WhatsApp for professional work, she says,

> World Wide Fund for Nature, WWF volunteers runs through WhatsApp groups. Makes it convenient to stay in touch with multiple people instantly instead of through email. Also makes it easier since you can see who has read the message etc. We also have team WhatsApp groups that mostly become a way of CCing people on stuff even on an informal medium. … I think it is a great tool, and WWF Volunteers could not have done without it, but otherwise I would prefer to not have team WhatsApp groups with bosses. … It does make transfer of media faster though. Has often helped with collection of media from state teams.

Others like Meera Vohra, 50, who works as Principal Correspondent for the *Times of India* in Varanasi, says she likes to receive news through WhatsApp. Calling it a "game changer", she believes life is better professionally after WhatsApp "as the chain of communication is strong". Most professionals have preferred WhatsApp over other platforms for being the "fastest mode of communication" or "user friendly" and "fun to use". Nikhil Dintakurthi, 21, founder *BMMGuru*, is using WhatsApp mainly for business. He believes WhatsApp makes "few small events that bigger platforms can't host or manage the ticketing (for) … reachable and approachable". He is using the app for business but says he is not sure it has made any difference for "B(Business) to B(Business) and client dealing, but for B(Business) to C(Consumer)", it has "reduced a lot of time gap". Medha, 64, is a dental surgeon by profession and likes WhatsApp, followed by Facebook, among social media platforms, not having accounts on Instagram, Twitter and LinkedIn. Medha says WhatsApp is "A useful chat platform and bridges the distance world over if used constructively". Asha Albert, 48, working as Corporate Social Responsibility and Corporate Communication Manager in Mumbai, says it is "easy to keep in touch with friends and family" through WhatsApp which is her "primary purpose" for using it as also for news and entertainment. WhatsApp is her favourite app from among the five listed by the authors, followed by Facebook, LinkedIn, Instagram and Twitter. Media officer at a prestigious institute in Mumbai, Dr. P J Mathew Martin, 52, likes to use WhatsApp not only to communicate, but also "to do research and interact with various groups of persons connected with my profession, relatives and friends". Rajnika, 49, a private sector senior recruitment professional, likes to use WhatsApp for official and social interactions, but wouldn't say it has made her professional life better as it "has its pros and cons". Abhinav Aga, 39, a businessman based in Vadodara says he uses WhatsApp "for social and business reasons". He says the app has been "very, very helpful" professionally for him and "for small customers, email has been replaced by WhatsApp". Not only that, he also gets approached "lot of times" for business via WhatsApp. Animesh Aga, a 32-year-old businessman from Vadodara, has no accounts on Facebook, Twitter, Instagram or LinkedIn and is a moderate user of WhatsApp. His reasons for using WhatsApp are that it is "available across multiple platforms, for free, non-intrusive. It feels ubiquitous, making it easy to message anyone as long as you have their contact information". The other feature he mentions for using WhatsApp is one that is not mentioned by any other respondent, which is that "extensive search allows to look for old relevant messages".

(b) **Ranking of the Necessities of Life**

Mobile phones rank above cheap transport and even affordable food for most respondents, though not above clean air and water.

(c) **Duration of Use**

The frequency of checking for messages seems more for this category with most saying they check their messages every few minutes, though most believe they spend an average of 1–3 hours on the app. However, the volume of received messages is very large for some like Tabassum, who says she gets between 1,000 and 2,000 messages a day, Tulsi (name changed) and Manisha estimate they receive around 1,000 messages daily, while Sarika (name changed), a news correspondent aged 30, believes she receives about 700–800 messages a day.

(d) **Preferred Content**

For Rajeev, "clever memes and timely tip-offs (traffic jams etc.)" are welcome. An example of the kind of message Rina likes to receive is "An album of old Hindi songs which I could forward to my parents and they could listen to all of them without visiting any other site online". News, chatting, some feel-good content, "good, smart jokes" "useful information" are what this category enjoys. Asha mentions one joke that she liked, which had the picture of a cemetery with the caption, "The man who invented autocorrect has died … restaurant in piece".

(e) **Problems with Usage**

*Good Morning* messages, chain messages, messages "spreading hate, divisiveness" are annoying for most professionals. Interestingly, Ria says she rarely receives forwarded messages, except for "useless jokes that an almost unknown uncle sends, I have to think a lot before responding because you shouldn't offend relatives". She says she rarely sees any such messages "unless my mom shows me". She says WhatsApp has caused "some miscommunication too, but I think that's just people being silly. Older generation doesn't understand WhatsApp etiquette (emoji)". Among other issues she has faced are "[r]andom video calls, sometimes being added to huge 256 people groups that I have no idea about. Good thing is, is easy to block people and to exit groups, so it's never been a problem". Among the annoying messages Sarika (name changed) has received on WhatsApp is "girl suicide", which pertains to disturbing videos being circulated on the app on the subject. Manisha did not like a forwarded message about "how a Hindu god manifested himself in a glass of milk". Sushil finds annoying "all preachy, motivational messages". Asha says she has been spammed by builders through the app, though not approached for business on it. Like so many others, Abhinav is also "fed up with *Good Morning* messages". Most common among the annoying forwards that Animesh mostly deletes without reading are "jokes on weight loss struggle".

### (f) Use of Emojis

The smiley is again popular here too, though thumbs up, lol and "heart pumping" and the dance are also used. The "crazy eyes" emoji is Asha's favourite to use in conversations, while the folded hands "Namaste" is Mathew's most used emoji. Abhinav does not use emojis in his conversations, neither does Animesh.

### (g) Favourite Features

Being a design professional, Rina appreciates that WhatsApp can be used for exchanging photos, videos with "no limit to file size etc and transfers are quick and easy. Even to people who aren't tech savvy". This was echoed by many in the category. The group chat and video calling features were also favourites among some. The best feature that Animesh likes is "ubiquity, I can contact client in Nigeria, sister in Delhi, customs officer in Navasheva port".

## V. The Armed Forces

Of the 12 respondents comprising middle-level officers of the armed forces, only 1 was a woman. Their locations were pan-India and were not specifically mentioned by them.

Most in this category said they use WhatsApp to keep in touch with friends and family. Entertainment and sharing humour were top reasons for using this app in this category. Wg Cdr Joginder Maini says he likes to use it "to read and forward nice messages, videos etc." too. He says, "whenever there is a good message, I tend to forward to my friends and in other groups". The kind of content he likes is "jokes, humorous messages, spiritual messages, self-improvement techniques etc." Wg Cdr Pradeep Nair says he finds the app useful for "entertainment and information gathering".

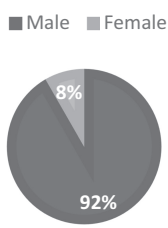


**FIGURE 3.14** Gender Ratio of Armed Forces Personnel Surveyed.

*Source:* Authors' survey

Giving more insight into the use of WhatsApp by armed forces personnel in an interview to the authors (B. Tripathi, personal communication, January 6, 2020), Brig. Tripathi (name changed) says:

> When you are posted to difficult areas where you are away from your family … (with WhatsApp and other social media) the problems at home become live for them and they get affected accordingly; which otherwise in the normal course … would have taken about 24 hours or 48 hours for the message to reach him and by then it (the situation) could have been already defused but now everything is live. So that is something which is, I would not say unpleasant, but is one of the side effects of being in touch. On the flip side also … he is aware of any such untoward incident which happens at home and he can immediately, from here, give a solution.

Commenting on another hazard of having WhatsApp and other social media for army personnel, Brig. Tripathi says that the ease of sharing made possible by these apps has meant that there is this urge to share their living conditions with their families. He says,

> for example I (as in any soldier) just want to show my unit. We have had a fresh snow fall or say we have had a fresh blizzard or something and you just want … your near and dear ones to see that picturesque scene which you are seeing. That, at times can become, you know, a security hazard. Because you have inadvertently clicked a photograph of an area, which if a person is sitting and trying to piece puzzles together, it helps him.

Personally, Brig. Tripathi (name changed) believes he spends some half an hour on WhatsApp every day and is part of only one group, following instructions in July 2019 given by the Directorate General of Military Operations to all serving military officers and soldiers to quit WhatsApp and other social networking groups where the identity of some users is unknown.[4]

### VI. **Homemakers/Housewives**

Rohini, a 63-year-old homemaker, checks her phone for WhatsApp messages "every time there is a msg. Can be every 5 minutes unless of course while traveling", when she doesn't check at all. She estimates she spends 1–2 hours a day on WhatsApp, sending and receiving 50 messages and interacting regularly with 25 people. The kind of content she would like to receive includes "entertainment, politics, news, if not fake". She feels that with apps like this "No more face to face talking happens. This is sad". Her verdict on WhatsApp as an app – "Good at times. Bad at times".

Homemaker Manju Upadhyaya, 68, uses WhatsApp for "interesting messages" apart from keeping in touch with friends. She says she checks her messages on the app some 50 times in a day, and spends 2 hours on it. She is not on Instagram, Twitter or LinkedIn and prefers WhatsApp over Facebook for use. Her estimate is that she receives around 200 messages and sends about 20 every day, and is interacting regularly with more than a hundred persons through this app. Among life's necessities, mobile phones are number 1 for her, followed by clean air, clean water, cheap transport and affordable food. She looks forward to entertainment and news as well as family news on the app. Among the forwarded messages she liked recently was "Atalji's poems" (referring to poetry written and recited by former prime minister, Atal Behari Vajpayee, circulated as a video on WhatsApp). She also believes families have come closer due to WhatsApp.

Pooja Aga, 39, who is a homemaker and a heartfulness meditation trainer, also rates WhatsApp as her most preferred platform to connect online. She uses the app mostly for chatting and likes group chats the best due to the ease of communication. She checks her messages not more than ten times and spends half an hour to 2 hours on the app. She feels WhatsApp has "brought closer" families. Even professionally, she feels it has helped in "faster communication" and her experience has been "good". The smiley and hug are her most-often used emojis. Summing up her views on WhatsApp she says, "It's a nice tool of mass communication if used sensibly. Otherwise, it can create nuisance too".

## VII. **Foreigners Residing in India**

The 21 respondents described in this section were mid-career working journalists from various developing nations and were in India to attend a four-month course in Development Journalism at the Indian Institute of Mass Communication. The countries include Cuba, South Sudan, Syria, Guinea, Malawi, Bangladesh, Nepal, Egypt and others. The most common response as to why they were using WhatsApp was that it was popular in India and they had started using it after coming to India to communicate with classmates and friends. Bintou Balde from Guinea says he likes to use WhatsApp for video calls because "during a video call one cannot record that video conversation or an audio call; that's the difference between WhatsApp and some other apps, so I think people feel secure using it". Tashi Wangmo from Bhutan gives the same reason: "It is user-friendly, boots faster and moreover it is encrypted, unlike other apps like WeChat". Another reason for using WhatsApp for them was that it was "a cost-effective mode of communication". Abraham Telar Kuc Kun from South Sudan has WhatsApp but does not like to use it. He says he uses it only to communicate with other people who are using it only when "I don't have any option but WhatsApp". One of

the reasons why Ayman Saad Abdellah Soliman from Egypt uses WhatsApp is that "you can use it everywhere abroad without changing number". He also likes the text feature, which is handy: "When I am busy, I can send messages or chat". An interesting insight given by Ayman is that he has "stopped recharging my mobile and stopped roaming on my mobile" because WhatsApp enables him to make calls using only Wi-Fi or mobile data, hence his expenses have come down. He says he was added to many groups which promote trips or sales on the app, and sometimes he has responded to that, "traveling via advertisement on WhatsApp group". Dipankar Bar, who is Senior Information Officer from the Ministry of Information, Bangladesh, is a regular user of WhatsApp. He says WhatsApp "has been alternative to cellular network" for him. Chowdhury Sahela Parveen, Information Officer in Bangladesh, says she has "two WhatsApp groups – one for personal liking/disliking sharing, another one for development issues related". Thomas (name changed) likes "emoticons the most. They are cute and relatable". Lily Kampani from Malawi says the app has caused her some problems, "accidentally sending messages to the wrong people" and sometimes receiving "obscene pictures of public figures". Mike Chilimampunga, a journalist from Malawi, has also got into trouble as he "sent a message to a wrong person" on the app. Shaza Mohammad from Syria complains that the app has caused her problems: "sometimes people unknown to me are trying to annoy me". Dipankar Bar from Bangladesh adds that "huge number of sharing in WhatsApp group makes (him) sometimes disturbed". Yodeni Maso Aguila from Cuba says, WhatsApp is not "common" in his country and he prefers the traditional communication. He says, "this application is another way of communication but its popularity depends on the technological development of societies".

## Conclusion

Across categories, respondents were of the opinion that they used WhatsApp mainly for keeping in touch with family and friends. However, each category had a top second reason for using WhatsApp: students said they *had* to be on WhatsApp to get information related to classes; government sector respondents gave "professional interactions" as a compelling reason to use the app; professionals liked the media-sharing features of WhatsApp; housewives and the armed forces personnel liked to use it for entertainment/forwarded messages and teachers for "exchanging information". A visual representation of the top reasons for use of WhatsApp across the various categories of respondents is given next.

Foreigners in India were largely forced to use WhatsApp to interact with Indian colleagues and acquaintances, but found it easy to use and inexpensive as compared to regular telecom calls. They liked the app as they could

**FIGURE 3.15** Word-cloud Listing Reasons for Using WhatsApp Given by Respondents.

*Source:* Generated via wordart.com by the authors

retain their original SIMs and use WhatsApp in India with it. For foreigners, the security and privacy afforded by WhatsApp to their voice/video conversations with family/friends/co-workers back home was also a big factor.

One worrying aspect from the response of students is their likelihood of getting addicted to WhatsApp, or in feeling loss of concentration due to constant flow of messages as well as the anxiety admitted to by a number of them when they are unable to use WhatsApp. The Zero Inbox Syndrome is also a reflection of someone addicted to their phones. Students from Jammu, Kashmir and Ladakh have, in their responses, said that they are aware that WhatsApp is being used for propaganda and are cynical about forwarded messages. Their lack of trust in content on social media, including WhatsApp, is another worrying factor.

Another insight that has come from the survey is that most people across categories value their mobile phones over the option of getting cheap transport. The duration of usage as reported by various categories is very high among students, while government officials believe they spend the least time on WhatsApp. Among newspersons though, the flow of messages seems higher than other categories, with most saying they receive over 800 messages in a day. Entertaining content is watched by the armed forces content as well as homemakers and is a prominent reason to use for the other categories too, though news and timely updates from authorities also figures in preferences.

Good Morning and chain mail messages are the bugbears for most respondents. But being constantly available for texts on WhatsApp was

something students and teachers complained the most about. Students also complained of unsolicited messaging and stalking by strangers as also misuse of their display pictures on WhatsApp. Inauthentic content was what students in Jammu, Kashmir and Ladakh were unhappy about. Random video calls and getting added to huge groups without consent (the WhatsApp feature giving choice in the matter was not available at the time of the survey) were also mentioned as being problematic. One person mentioned the Delete for All button, then newly introduced, as the best-liked feature. Some people in the mostly older category (50+) bemoaned the fact that WhatsApp had killed face-to-face conversations.

The smiley emerged as the favourite emoji for almost all categories. Students seemed to be the most proficient in its use; their reasons for using emojis ranged from giving emotion to text conversations, using emojis when they did not know what to say to end chats to make chats look livelier and just because they were fun to use. Other emojis mentioned were the thumbs up, folded hands (often interpreted as the high-five icon in western cultures), dancing lady, smiley with tears of joy and laughter emoji.

The one feature that has endeared WhatsApp to users as per respondents is its ability to be used to make audio and video calls even in the absence of telecom networks, provided Internet connectivity is available. Multimedia messaging is an attractive feature too, as it is being geographically neutral.

*Limitations:* This qualitative survey has numerous limitations, the first being that it uses self-reporting as a format. It also has an urban bias and that it was conducted in 2018. The students surveyed are almost all with a background in journalism and mass communication. The categories are not exhaustive. However, this was intended as a dipstick survey with a convenience sampling. More rigorous surveys are needed to draw more reliable conclusions.

### Quotes from the Survey

"WhatsApp is now the sixth element required for life". – Abhinav Aga, 39, Vadodara.

"*Yeh patra ka sankshipt roop hai, jisse tatkal saamne vale tak pahunchaya ja sakta hai aur tatkal jawaab payaa ja sakta hai*" (translation: it is an abbreviated form of a letter through which one can convey one's query to a receiver immediately and also receive an immediate answer). – Prof Ashish Tripathi, 45, Varanasi.

"I find it difficult to always be available on WhatsApp – which has become a common expectation now". – Mahima, student, Delhi.

"*Social media ke iss daur mein kuchh cheeze nai si hain jinse zyaada waqt tak munh nahi moda jaa sakta jabki waqt ki maang wahi ho, samaaj*

*mein kya chal raha hai, yahi jaanne ke liye ya kuchh cheezon ki soft copy lene dene mein maine shuru kiya tha par ab yeh good-morning good-night tak seemit ho gaya hai*" (translation: in this age of social media, there are some things one cannot help but become a part of. I started using the app to find out what's happening in society and also to get the soft copies of documents etc, but now I find myself just restricted to good morning and goodnight messages.)

Om Prakash, student, Delhi.

"I use it (WhatsApp) for conversations or to sneak peek into the statuses, aka 'current mood definers' of people I know". – Gagandeep Kaur, student, Delhi.

"In past I faced so much problem using WhatsApp while studying in graduation. So, first I deleted WhatsApp and then deleted smartphone also from my life". – Piyush Kumar, student, Delhi.

"Your mobile phone without WhatsApp feels useless". – Shyna Singh,

"I was off WhatsApp for a year – the most peaceful year ever since I got on WhatsApp. Have joined it again solely for college and professional purposes". – Kamala (name changed) 22, student, Delhi.

"I'm a little lost (when WhatsApp doesn't work). I don't like talking on the phone as much and so it is almost as though I have lost touch". – Ritika (name changed), 22, Delhi student.

"At the University level, WhatsApp has made life much easier. Students have a WhatsApp group with the teachers where they were informed about class timings, extra classes, classes that are to be cancelled, etcetera. Study materials are also shared on such groups". – Apurba Banerjee, 22, student.

"Repetitive words like 'Arre Nahi Yaar', 'Kya Baat Kar Rahe Ho' 'O Bhaiya', 'Bas Yaar Rehne De' etc. in animated texts will make chatting funny and save time". – Suggestions for emojis from Nilesh, 39, central government officer.

"My emotional lifeline". – Asha Albert, 48, professional, Mumbai.

"It is useful when we use for Information sharing on education, employment and other nation building activities". – Shreekanth G.J., 30, government servant, Bengaluru.

"The problem with WhatsApp is you're easily available and your phone may keep vibrating 24–7. There has got to be a life off online". – Kamala, 22, student.

The personal account of Toshi that follows gives insight on how WhatsApp has come to the aid of minorities in providing them safe spaces to interact; the fact that it is encrypted gives courage to those likely to be persecuted for "being different". The lesbian, gay, bisexual, transgender and queer community, popularly referred to as the LGBTQ community is one such.

### The Story of Toshi, 27, LGBTQIA+ Activist

(Toshi has been with the left movement and the queer movement for about a decade.)

Toshi says she does not have very many WhatsApp groups, perhaps ten. She was part of a friends group but left it as it was being influenced "by daily politics". According to her, the "news" that was discussed there did not match her "political ideology" because of which her friendship with other friends was getting "kharaab" (spoilt). She says it's possible for persons with different ideologies to be friends but WhatsApp has removed any kind of space (for disagreements) and her friendships were in danger ("khatre mein aa gayi thi") so she had to quit the group.

Talking about her experiences in the queer WA group, she emphasises that within those groups too, the same privileges exist; there are divisions along the lines of class and caste and misogyny and sexism are prevalent, "even homophobic jokes bhi bhejte hain" (they send homophobic jokes too). Being from a small town like Allahabad (now Prayagraj), she had her "coming out" only two years ago (2017). After that, she has been a victim of harassment from her male friends who have been sending her indecent messages saying she would probably consider changing her mind about her sexuality if she spent a night with them. That really hurt her as years of friendship were disregarded when they made such comments.

The queer movement is "basically an elitist movement" where small towners do not get those privileges, she said. Taking her cue from the coming out of a friend, Dharmesh, she decided to go ahead and do her own, and then decided to work for the queer community in Allahabad along with him, setting up four WhatsApp groups for that purpose. But the threats also come via WhatsApp. Any events etc. being planned are coordinated through these groups, which are closed groups as not everyone has had a "coming out". For instance, the transgenders can have a "threat to life" if called for such gatherings, so they inform them on the WhatsApp group alone. They are also given instructions to only contact the moderators to inform whether they will be present and not contact the other members without consent. A member who was depressed because of some mishap also made contact for support through WhatsApp, though the group could not reach him in time and he committed suicide. "Cruising" has become much easier through the app too.

There are only about 20 people in her group, but those seeking support for sorting out issues relating to their sexual identity are numerous.

Conversations on Facebook are a strict no-no as privacy is the utmost concern. WhatsApp fills this space where encrypted conversations can help such minority groups. Those associated with the left groups have also found

WhatsApp calls a good way to ensure any wire-taps to their phones are rendered useless. Since their main fight is with the state, it is safer for them to use an encrypted medium like WhatsApp.

In understanding her own sexuality however, it was the internet that came to her rescue where she started looking up the terms related to sexual orientation. Support groups on Facebook have been a help for those looking to clarify their own sexuality. But a number of confused people have reached out through WhatsApp to Toshi for help. For example, Toshi formed a bond with a lady much older who was inspired by her talk and pinged her. Now they are friends through the app, though they've never met, and she sends her gifts through online delivery. When asked about the intimacy that the platform provides, Toshi said that there is an angst there too because the kind of people they talk to on the app and who they are interested in cannot be considered suitable mates by family.

## Notes

1 Information about the Kodagu floods can be found at https://www.news18.com/news/india/karnatakas-kodagu-battles-floods-landslides-after-heavy-rains-army-joins-rescue-operations-1848525.html. Retrieved January 13, 2020.
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# 4

# POLITICS AND ELECTIONS

## The Virtual Battleground

*In May 2021, Megha Mohan, a gender and identity journalist with the BBC, wrote about how she almost quit her family WhatsApp group because of a meme giving political colour to the Covid-19 pandemic situation in the second wave (April–May 2021) and the comments that followed (Mohan, 2021). A family member's supposedly funny comment added to her anger and unease, joking about how when the world was worried about Covid-19, Indians were worried about whether their maids will turn up. At a time when it was being reported that 80% of domestic workers had been laid off amidst the pandemic, the humour of the situation escaped her. This led Mohan to take a look at trends about these kinds of jokes and memes and to her surprise, she found them to be quite common. She spoke to a researcher, Dr. Charusmit, who said that for some people, these could be "a fairly innocent way to find some levity amidst a large-scale catastrophe". Covid-humour memes or "gallows humour" seemed widespread on Indian WhatsApp and Telegram groups. She quotes a researcher, Dr. Rohit Dasgupta, whose specialisation is in Indian digital culture as saying that this kind of humour is not being reported on much. Gallows humour, he says, could help deflect the pain. She did not leave the family group in the end as some "fashion photoshoot" images of children in the family found their way on it, and all was well again.*

*Anecdotal evidence suggests that politics has evoked strong emotional reactions in family's and friends' WhatsApp groups, as evidenced in the authors' survey too.*

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## WhatsApp and Politics: A Brief Outline

Social media's potential as a space to interact and mobilise on a wide scale was beginning to attract political activists in India in the decade after 2010. It was felt that surveys and social media analysis as far back as in 2013 did not account for "its indirect benefits like word-of-mouth and incorporation in the traditional media channels". The possibility was voiced that social media could reach "targeted groups which are difficult to reach through the traditional media, particularly in countries like India where distances as well as ethnic and linguistic divisions make it difficult for regional political parties and candidates to compete on the national stage" (Saleem & McDowell, 2016). Media scholar Pamela Philipose argued that in the Indian elections of 2013, 2014 and 2015, even if voters did not directly access social media, they were "tangentially" exposed through content on mainstream media which in turn was influenced by social media content (Philipose, 2019).

By 2015, Facebook and WhatsApp had started figuring in political handbooks such as the one brought out by the National Democratic Institute in Morocco titled *Moving Closer to Citizens: A Manual on Outreach Constituents for Elected Representatives in Morocco*. By that time, the Election Commission of India was using social media to reach out to voters in the regions too ("Important Highlights", 2018). Political parties were seen to be making use of social media for campaigning in a big way around that time. However, WhatsApp was not as much on their radar. But by 2017, political analysts started predicting that India was only a few cycles away from a WhatsApp election (Sen, 2017). The entry of Jio as a low-cost mobile data player was another factor that helped increase the influence of WhatsApp in this duration. In the words of Pamela Philipose, "Facebook and its digital properties – WhatsApp and Instagram – have benefitted directly from affordable mobile data. … WhatsApp (in 2018) … has emerged as a major election tool" (Philipose, 2019).

Meanwhile, the use of WhatsApp for news had gone up three times in the years between 2014 and 2019, according to a report (Aneez et al., 2019) from Oxford University's Reuters Institute for the Study of Journalism in 2019. The report supports other studies in saying that the future of news in India is mobile-first. But the more startling finding is that a majority of Indians "find news through platforms, particularly search (32%) and social media (24%) with fewer accessing news directly (18%)". Facebook and WhatsApp, says the report, are the main social media platforms used by those surveyed and 52% of each "use these platforms as a source of news". The 2021 edition of the same report from the Reuters Institute says there is an even greater dependence on social media for news, especially in the time of a pandemic in India. For 63% Indians, online, social media is a source of news now and a whopping 82% find news online (including social media). The report says,

"WhatsApp, YouTube and Facebook are widely used for news" in the country. Of these, WhatsApp is used by 53% respondents for news and 80% for all subjects. For 53%, YouTube is their source of news while Facebook is for 43%. However, all three have had "serious problems with misinformation and hate speech". This problem of the spread of fake news through social messaging apps such as WhatsApp is a matter of concern for many countries in the Global South, including Brazil, Indonesia, India, Nigeria and South Africa, as per the report (Aneez, 2019).

Another study conducted in the Netherlands in 2020 examined aspects of social messaging. This study looked at how messaging apps, particularly WhatsApp, were perhaps "serving as a resource for engaging adolescents with politics and current events". It started with hypotheses to check if youngsters' attitudes could be modified by exposure to messaging on WhatsApp messenger. The study found "that participation in a WhatsApp group with very strong ties made participants feel more curious, happy, and excited compared with participation in a WhatsApp group with somewhat less strong ties". Also, that political discussion on WhatsApp helps increase issue-specific knowledge" (Vermeer et al., 2021). And this underlines the need to understand the rapid use of the app for politics.

India is not alone in seeing the rise of insidious campaigning over personal smart phones via WhatsApp. In research conducted by Tactical Tech ("WhatsApp", 2018) in the past few years, it has become "clear that since 2015, WhatsApp is increasingly becoming the main tool for political campaigns in the Global South, and its influence is continuing to grow" ("WhatsApp", 2018). In countries like Brazil, Colombia, Kenya and Malaysia, WhatsApp has become a major part of the political process, according to them. The study has also shown that information received on WhatsApp has a "greater impact" as it comes from seemingly reliable sources and comes as "personal single messages from specific contacts". The factor of "free access" to WhatsApp and Facebook in some of these countries is also a crucial element in their widespread use. The same was not allowed by the Telecom Regulatory Authority of India, TRAI in India when India adopted "net neutrality" or equal treatment for all websites in 2018 (BBC, 2018). The immediate provocation then was an understanding between Facebook and Reliance Communication to allow Facebook to be accessed for free on phones under the Free Basics Platform (Parsheera, 2020).

This chapter is based on primary data from interviews as well as a survey conducted by the authors. The survey respondents numbering 205 people were spread across India. Of the 184 respondents from India, 53% were men and 47% were women, spread across five categories – students, government, teachers, professionals/entrepreneurs and the armed forces. More than half the respondents were students and in the age group 16–26 years. There were also 21 respondents from foreign developing nations, temporarily residing

in India. In addition to the primary research, secondary data from journals, articles, books and reports were also used.

## Indian Elections and Social Media

### *What Makes Social Media Different*

The shift of news consumption and political engagement from legacy media to social media can be viewed through the framework of the Uses and Gratification theory where it can be surmised that consumers are using social media for political engagement, including WhatsApp, in return for gratification in the form of gaining social capital. Social media have characteristics that are very different from those of legacy media in allowing not only vertical but also horizontal interactions with formats ranging from one-to-one and one-to-many, and vice versa. This not only helps organise collective actions, but also changes the way politicians and citizens interact. Another important aspect is of immediate feedback on any policy initiative and to get analytics.

The same features, however, could also be used to oppress the public or employ political surveillance (Zhuravskaya et al., 2020). The easy sharing of content across groups makes it an instrument of propaganda and politically motivated messaging. Here the framework of Herman and Chomsky's (Herman & Chomsky, 2010) propaganda model could also be relevant which says systematic propaganda is pushed towards the masses by the dominant elite through a "marginalization of dissidents". This happens through five filters of media ownership, advertising, reliance on government, flak as a means of disciplining the media and anti-communism as a control mechanism. Meanwhile, as mentioned in Chapter 2, Soshana Zuboff's "surveillance capitalism" also comes into play with big Internet companies gaining insights into consumer behaviours and wants through gathering data and making prediction products. Further, user behaviour is shaped and modified using behavioural data, enriching the surveillance capitalists, among whom she counts Google, Facebook etc. It must be reminded here that Facebook is the parent company of WhatsApp (Zuboff, 2019).

### *WhatsApp and Elections in India*

In November 2019, journalists following prominent Maharashtra politician, Supriya Sule, found a new source for breaking news amidst the ongoing political high drama in the western state. Sule chose to react to the developments in the state politics via her WhatsApp status which said, "Party and family split", reflecting her disillusionment with her cousin breaking away from the party she belonged to, to align with the rival party along with a faction and being rewarded for his support with the post of the Deputy Chief

Minister of Maharashtra. That status was followed by "Who do you trust in life … never felt so cheated in my life … defended him, loved him … look what I get in return". This was one of the first instances when WhatsApp became a source of news also for stories relating to politics ("Never", 2019). But the use of WhatsApp was not new to Indian politicians. The leader of the Aam Aadmi Party (AAP), Arvind Kejriwal joined WhatsApp in 2014. *The News Minute* website gives an interesting report on how his messages were being handled. If anyone contacted his number, they would first hear a song which urged them to vote for AAP. This would be followed by a text "thank you" message and also an apology that the AAP leader might not be immediately able to respond, with an assurance that he was definitely reading their messages ("Kejriwal", 2015). The Indian National Congress party also launched its official WhatsApp number around 2015. But the Bharatiya Janata Party (BJP) on Twitter (@BJP4India) in 2014 urged people to send their names and pin codes to their WhatsApp number. The use of this information would become clearer later in this chapter.

It was in the 2014 Indian general elections that social media came out to play. Memes and jokes trending on the relatively "open platforms" like Facebook and Twitter started filtering down into messaging platforms like WhatsApp which were more closed. Studies on WhatsApp have shown that political discussions in groups on messaging apps are likely to evoke a positive affective response and can impact positively issue-specific knowledge (Vermeer et al., 2021). In 2018, the Cambridge Analytica scandal in the United States exposed how a consultancy firm used data collected through Facebook and designed political campaigns (Sardesai, 2020). Mistrust with media organisations was already high, and with this, the shift to closed platforms was almost predictable. As the India Digital News Report (2019) puts it, the respondents of its survey "have low trust in many news media, high concerns over the possible implications of expressing political views, and are worried about different kinds of disinformation" (Aneez et al., 2019). In this kind of atmosphere, the relatively safe space to discuss politics was with messaging platforms such as WhatsApp which offered end-to-end encryption.

### *Popular Content during Elections: Some Highlights*

In 2017, the failure of the Congress Party and the Samajwadi Party to stem the tide of the BJP that swept the Uttar Pradesh Assembly polls was marked by many memes on WhatsApp that put the blame for the loss on specific leaders ("UPElection", 2017). This marked the culmination of a bitter war, fought sometimes with humour, on social media, with a stellar role being played by WhatsApp.

In fact, the two biggest political parties had started the social media war much earlier with the creation of two online personalities – *Pappu* and *Feku*,

purporting to refer to political leaders. The war of words ranges from funny, sarcastic, witty to downright vicious and false. Pappu was shown as bumbling, immature and foolish, as well as being out of touch with the ground reality, while *Feku* was shown as bombastically offering freebies which never actually materialised.

The personas became so popular that politicians found themselves using it even in internal communication. In 2017, one such political worker was hoist by his own petard when he used the epithet in WhatsApp chats to refer to his leader. Reports tell us of the political worker being divested of all posts in the party following that gaffe ("Calling", 2017).

By the time the Assembly elections in Gujarat came in November 2017, the *Pappu–Feku* personalities had become established in the public imagination. As the social media war heated up, the State Election Commission had to intervene on November 15, 2017, to ask one of the parties to remove the word *Pappu* from their audiovisual campaign advertisement as it was targeting the Opposition leader, though he was not directly named ("Massive", 2017).

Social media also allowed parties to respond to these caricatures and sometimes turn them around to their advantage. One such instance happened in 2014 in the lead-up to the Legislative Assembly elections in Delhi, with the AAP. Their leader, Arvind Kejriwal, was often derided as an unstylish bumpkin, someone who wore a muffler in a rustic manner wrapped around his head and was always coughing. Twitter was the platform of choice where #Mufflerman was used extensively by those from opposing parties to make fun of Kejriwal. However, in an inspired move, an AAP volunteer, Mohammad Shadab, came up with a poster showing Kejriwal as a superhero on the lines of Batman, Superman etc., with the tagline, "Mufflerman Returns: The Corruption Hunter", standing the entire joke on its head. Soon, AAP itself adopted the epithet for their leader and it began trending on Twitter, lasting as a trend for an entire 19 days! (A. Lal, personal communication, 20.12.2017) Though this campaign was mainly on Twitter, Mufflerman jokes were common on WhatsApp during that time, as was the counter-campaign. As Ankit Lal, Social Media Manager for the AAP, said in an interview, "you need a 360-degree strategy … and you need to continuously look for newer platforms to disseminate your message". The Twitter campaign was followed up with an interview on *The Viral Fever*, an online platform where Kejriwal made the muffler a prominent accessory and poked fun at himself, going as far as to seat himself with an actor who mimicked him in his clothing and style.[1] This further cemented his position as a politician not afraid to laugh at himself and as someone who was neither ashamed nor forgetful of his humble beginnings. It also resonated with the name of his party, meaning an average or ordinary man.

### *Social Media Structures in Political Parties: A Study of the BJP, Congress and AAP*

By 2012–2013, AAP had started utilising WhatsApp in a consistent way, along with other social media platforms. However, they were at a distinct disadvantage in utilising social media as effectively as the BJP, which, as Ankit Lal, AAP's Social Media Strategist himself admits, "beat all other parties both in engagement volumes and percentage". Commenting on the 2014 general elections, Lal says, "The last weapon in the BJP electoral strategy was WhatsApp, which was where, in my opinion, the real game was played".

The BJP was ahead of the curve of most political parties when it came to social media. In an interview to Swati Chaturvedi for her book *I am a Troll* (Chaturvedi, 2016), the architect of the BJP's social media strategy, Ram Madhav said, the Information Technology or IT *shakhas* or branches which conducted training on social media for BJP *karyakartas* or workers started in the early 2000s. The party had an early start in the domain of information technology, with the launch of their website in 1995, a full decade ahead of the other big party in the country, the Indian National Congress. Their farsightedness was reflected in the use of social media too, with the party understanding the importance of social media platforms much before the others.

BJP leader (and current Prime Minister), Narendra Modi got on to Twitter in 2009 itself; in contrast, Rahul Gandhi, the Congress President, made a very late, very nondescript entry on to Twitter with the official handle @ Officeof RG in 2015. It was only in 2017 that the Congress' online presence got a boost with new blood joining their social media cell (Bharadwaj & Khajane, 2018). Even then, the Indian National Congress, INC's followers as of March 2021 on the official handle @INCIndia on Twitter number 7.7 million, less than half of the BJP's numbers at 15.6 million followers for its handle @BJP4India and just about catching up with the Aam Aadmi Party which has 5.6 million followers on their handle @AamAadmiParty.[2] To a question posed by Chaturvedi to Ram Madhav on whether their party had "already moved on to WhatsApp, with the promise of an even more targeted audience", he was quick to reply, "Yes, of course, and apps" (p. 135). In other references in the book, Chaturvedi tells of how WhatsApp was the medium chosen to talk to the social media volunteers and workers from the National Digital Operations Centre (NDOC), the digital headquarters of the party. She quotes Sadhavi Khosla, former social media volunteer, as saying they had some 20 or 21 WhatsApp groups which received messages from headquarters on the line and substance of their social media output for the day (Chaturvedi, 2016, p. 60). But this seemed to be the universal practice with political parties who found encrypted WhatsApp the best way to reach out to their volunteers. For the BJP, the next step was the NaMo

app to reach out to their members. The app allows users to directly connect with the Prime Minister Narendra Modi and gives latest information and messages for directly contributing towards various tasks.[3] But for internal party communication, WhatsApp seems to remain the platform of choice. The structure for communication adopted by the BJP though seemed more centralised and disciplined, in comparison with other parties.

For instance, in an interview with the authors on December 20, 2017, Ankit Lal, the social media strategist for AAP, described the working of the social media cell of the party as "a distributed discrete model" which was more open to inputs from volunteers. To quote an example, he said, "Jaise aaj hamare volunteers ko mood hua ki Twitter pe bahut gandagi ho gayi hai toh swachhata abhiyaan chalate hain, to aaj ye log trend chala rahe hain #SwachhTwitterAbhiyan. Thankfully in our organisation at least the volunteers have that kind of ability" (translation: "For instance, if our volunteers feel one day that there is too much dirt on Twitter, and they would like to run a cleanliness campaign on it, then they push the trend #SwachhTwitterAbhiyan or #CleanTwitterCampaign"). Asked to comment on the size of his team, he said:

> The team size keeps fluctuating depending on the kind of campaign we're doing. We have overall a team of 5,000 people who keep contributing on an on-off basis. And, of these, 200 people is the ideation team and 20 people is the core team. Ideation … bouncing off ideas, they give ideas, we discuss ideas with them, we discuss campaigns with them…thankfully, it's very segregated now, in the sense that they have different people who lead Facebook now, different people who lead Twitter, different people lead WhatsApp, different people who work on YouTube. So, I have to talk to only 7–8 people, then they talk to their 7–8 people, so it's a tree structure.

In contrast, the BJP in 2014 had 200 people in its social media cell in Delhi alone (Chaturvedi, p. 58). Even the Congress, a late entrant, has a 40-member core team as of 2017 for social media. Interestingly though, the Congress team headed by Ramya, or Divya Spandana as she is known outside the southern film industry, had the largest proportion of women, roughly 85% of the total team. Divya "took a break" from social media in June 2019 after the rout of the Congress in the general elections for unspecified reasons (Swamy, 2020). (Rohan Gupta has been heading the social media cell of the Congress Party since 2020.) (Dutta, 2020.) According to a *FactorDaily* report, the Congress too follows a centralised approach – researchers put together material that the leadership wants to use, this is sent back to the leaders for spreading on social media, according to platforms and is then "pushed out".

### *WhatsApp and Election Campaigning*

By the second half of the decade 2010–2020, whatever the structure of the social media apparatus of political parties, it was clear that they were all targeting WhatsApp as the preferred medium to directly connect with voters. The Congress social media head is quoted in *The Hindu* as saying, "It's not just Twitter and Facebook; instant messaging platforms like WhatsApp or even SMS in rural areas seem to be the best platform to reach people" (Bharadwaj & Khajane, 2018). Lal of the AAP has been quoted elsewhere as saying, "We wrestle on Twitter. The battle is on Facebook. The war is on WhatsApp" (Goel, 2018). The ruling party's president, in fact, went on record to say in 2018 that "We are capable of delivering any message we want to the public, whether sweet or sour, true or fake". And this confidence came on the back of having "put together two huge groups of its supporters on WhatsApp – together comprising a stupendous 3.2 million users". This, say media critics Cyril Sam and Paranjoy Guha Thakurta, was the "weaponization of WhatsApp" that took place before the 2019 elections (Sam & Thakurta, 2019).

Naman Pugalia, a former political campaigner and strategist, is quoted in a *FactorDaily* article in September 2017 as saying that India is a "few cycles (elections) away from having a WhatsApp election…. With social media, you look at a very small set of audience but true sentiments are shared on WhatsApp because it is personal" (Sen, 2017). But India seems to have already proved him wrong with the May 2018 elections in Karnataka, which have been dubbed the "WhatsApp First elections" (Gowen, 2018). Reports in various dailies said the BJP was preparing for this election with the creation of 5,000–10,000 WhatsApp groups (Verma, 2017) or perhaps 20,000. But these numbers, as pointed out by Divya Spandana of the Congress, seemed too little (Sen, 2017). Ankit Lal, in an interview with the authors in December 2017, said the highest number quoted for the BJP's strategy of forming WhatsApp groups was 50,000 groups by *The News Minute* website (Bhat, 2017), but even that was far short of the actual target of the party at around 2,00,000 WhatsApp groups. The Congress said it was looking at a target of creating 3,00,000 WhatsApp groups for the Karnataka elections (Sen, 2017).

WhatsApp offers one-on-one chat, group chat as well as the broadcast feature. But why is it important for political parties to be on WhatsApp groups? As Ankit Lal explained during the interview:

> people believe more on what they receive from someone they know. Secondly, nowadays people get added to so many WhatsApp groups all the time, people tend to leave lot of groups and not even open something that they receive from unknown numbers. But when they are added into

a group in which, at least 4–5 people who they know are there, the retention is much more.

With its first-mover advantage, the BJP has a method to achieving their target. Their extensive network on the ground is another factor in their favour. As elucidated by Lal, they have the concept of *Panna Pramukh*, literally "Person in charge of a Page" or one person who is responsible for reaching out to all voters listed in one sheet of the electoral rolls. These people now make the first contact with voters and get them included in WhatsApp groups where they are exposed to messaging which is favourable to the BJP. It makes sense to have a local face which makes entry into the WhatsApp groups smoother with voters. After meeting someone in one's own neighbourhood, if that person requests to add one to a WhatsApp group, one is unlikely to say no. Of course, the freedom to exit from the groups is always there. The options of chatting one-on-one and broadcasting messages to the entire contact list is always there for that one can access via WhatsApp.

### (A) *WhatsApp Groups for Sale?*

Seeing the importance of WhatsApp groups, Ankit Lal (2017) said he had heard from more than one source that WhatsApp groups are now on sale to political parties. He said, it was reported that one vendor made 80,000 groups for a single party during the Uttar Pradesh elections mentioned above. But at the same time, the vendor was working in Punjab for Prashant Kishore (PK), a professional election strategist. According to Lal, the vendors do not produce content, only distribute content and have no qualms working for opposing parties. They have some kind of software for generating links to each group where they can get people to join election booth-wise or they can give them the data, including "electoral data (which) they cross-match, collapse people into families, figure out who the family head most probably is, who the target audience is, as per that area is, depending on caste, religion etc." He said during the Gujarat state elections in 2017, one vendor earned around Rs.50,000,000 from the Congress. However, the authors were not able to independently substantiate this.

A cursory search on the Internet turns up many marketing agencies for WhatsApp who claim to have a reach of thousands for the client's messaging needs. A randomly selected agency from search results on Google was TBI Technologies[4] which purports to reach bulk WhatsApp messages to phone numbers that can be "directly filtered" to contain only those numbers that are active. The charges are reasonable, with 100,000 people being reached for only Rs.30,000.

(B) ***Content Creation on WhatsApp: Appeals, Timing, Engagement, Language***

Giving a glimpse on how the process of creating content for the AAP works, Ankit Lal told the authors:

> In our party we have people who are assigned to specific tasks and the manner in which our thing (sic) functions is … a distributed discrete model, I would put it that way. So, the guy who leads it is a neonatologist based out of Bhuj. So that's the interesting part about WhatsApp, you need not be somebody who is sitting full time and working 24 × 7, the key in this is being connected to the right people and getting (the) right kind of content generated. So, something that goes on Twitter or Facebook is not the right kind of content for WhatsApp, all three platforms have different kind of content – the baseline, the base message can be the same but they have to be curated in a very, very different manner. On WhatsApp for example, use of emojis is very, very necessary, which on FB and Twitter we don't do that much. On WhatsApp it's also very, very important that if you are sending a video, the video should be less than 3 MB in size, as far as possible. Even if we try to tone down the video, we make sure that even if the video becomes granular, the audio quality is high. Because what most of the people on WhatsApp do, is not watch but listen … in terms of any kind of messaging on WhatsApp, you're watching something on phone, so by default the screen size decreases … and also, the level of distraction is very, very high. To capture the audience, if the audio is bad, you've lost the audience. So, we make sure the audio quality is higher, even if we have to compromise on the video quality. Audio notes is a huge thing on WhatsApp nowadays. We all use audio notes …. I use it less, but if I have to send something to my team, like "Yeah, it was a good campaign today and let's keep this up", that is simple. But by doing this, you're having a personal connect which is missing most of the time when you're using FB or Twitter. When you tell something in your own voice to somebody, especially from the perspective where I am coming from where I'm heading a team, it becomes very, very important. So, within the core team, having the personal connect is very, very important. In politics, everything works on faith. So, if we have to have that level of faith with each other, which a team of 20 people or 200 people has to have faith, so you get to solve HR issues, you get to solve content issues, you get to solve technical issues, apart from the campaign and the visibility.

A BJP youth leader is quoted in a report by the *New York Times* (NYT) as saying that WhatsApp was an "effective" tool for him which enabled him to get at least 13 "previously uncommitted" voters to vote for the BJP through

his WhatsApp group of 60 members during the May 2018 Karnataka elections (Goel, 2018). The messages used on these groups were, in all likelihood, created in a centralised fashion and exploited different approaches to sway unconvinced voters, sometimes using even falsehood to bolster claims. As the platform allows content creators to remain anonymous, it is virtually impossible to trace their origin. According to the report, how it worked for the BJP in these elections was that members were given a set number of voters to "track for the party", these members created WhatsApp groups for them to circulate pro-party messaging to, and the process continued till the last day possible before the elections. As the youth leader tells the NYT reporter, every minute there was a message on the group he created and was responsible for.

Volunteers have the option to fill up a Google document for indicating their preferred area, which could include "WhatsApp Group Management" (Niranjankumar, 2018). The leader of their social media cell for Karnataka, in 2018 is 27-year-old Balaji Srinivas, who keeps the groups supplied with content that ranges from replies to opposition leaders' tweets or videos or infographics about the party's achievements in the state.

The Congress' Karnataka social media cell has Srivatsa YB as its leader. According to the report (Niranjankumar, 2018), the 30-member team reached about 15 lakh people daily and was credited with being behind the memes and videos deriding the BJP's leadership.

In the hurly-burly of elections, a number of facts could get twisted; but when the twisting of facts is deliberate and intended to create disharmony, the atmosphere gets vitiated. Among the array of tools available for spreading information, "WhatsApp works like a nuclear chain reactor" in the words of Congress Party spokesperson, Randeep Singh Surjewala, in an article in 2018 (Goel, 2018). The article also quotes Govind Ethiraj, founder of fact-checking website, BOOM Live, as saying that WhatsApp is "insidious" in the way it helps to spread false information. The way information flows on WhatsApp from one group to another, with one participant getting the same information from several groups and the anonymity of the source, makes it a potent tool for the spread of misinformation.

As AAP's social media unit head, Ankit Lal said, to counter such fake information is vital for a political party (A. Lal, personal communication, 20.12.2017). According to him, this has to be done quickly like in the golden hour as in the case of an accident.

> If there's something wrong, somebody is presenting wrong facts, if it is replied to and corroborated with facts in the first half hour, one hour, then it is very, very likely that the influencers won't fall for it. The problem starts when mainstream media people or social media influencers, people who have 20,000 followers, one lakh followers, start saying the same

> thing. A person with 1000 followers saying something does not make that much of a difference. But if that fact is picked up by somebody bigger, and especially if the fact is repeated in mainstream media, like the term *presstitute* was picked from social media, used by the bigger handles to the extent that a Minister like V.K. Singh used it for mainstream media in a press conference. That cycle needs to be stopped.

It is usually only a matter of chance that the originator of any fake content is brought to justice, as it happened in the case of Kishtaiah in Hyderabad. Mahesh was the group admin for a group named "Society of Friday" where Kishtaiah shared "violent messages with fake content" on the group. The group had the local Assistant Commissioner of Police, Rameshwar, as part of it and he asked Kishtaiah to stop sharing such messages, but "he was reluctant". In this particular case, it was relatively easy to find out the source of the message and identify the miscreant and with a police person taking interest in it, a case was lodged immediately. That does not happen in most cases as it is difficult to know the origins of many forwarded messages as the app encrypts content.

The fact-checking website *Alt News*, profiled at least 13 instances of fake news circulating before the Karnataka elections, aimed at swaying the undecided voter (Sidharth, 2018). These included fake polls, made-up atrocities, fake videos of harassment of women, fake audio of communal messages intending to incite etc. The question is: Why is fake content so popular among political parties? According to Neelanjan Kumar of the Centre for Policy Research, even if such content does not alter anyone's political views, they do help increase the "turnout in areas with strong caste or religious divisions" (Goel, 2018). That said, the virtual bombardment of voters before elections with political messaging on social media platforms, including WhatsApp, becomes more understandable.

The content creation "factory" of political parties never sleeps, though. Not only just before a major election, but at all other times too. It is interesting to note that political messaging uses mainly two primal appeals on social media – fear and humour. Fear is what fake news targets – fear of the "other", fear of being left behind and so many others. We wanted to understand how important humour was in their content on WhatsApp. AAP's Ankit Lal said,

> Humour is the key. Because it transcends the boundaries of language, of caste, creed, of ideologies …. So even if I don't understand Haryanvi, I'm primarily a Hindi speaker, but even if I don't understand Haryanvi or Rajasthani or Punjabi for example, but once somebody makes a joke, it is very, very evident, especially if there are transcriptions below that regarding what it means. So, it works for people who even understand the

> language only a bit. I need not be an eloquent Punjabi speaker to be able to understand a Punjabi joke.

Asked if language is a barrier or prerequisite for understanding the humour, he said:

> Two types of things are happening with humour – one is there that very, very localised kind of humour which is very, rugged, which is meant for the local audience; then there is the well-produced humour, like what AIB does, that's the kind targeted at audiences like us – educated, urban, elite audience. Now humour also has a trickle-down effect which most of us miss.

He goes on to say that previously one couldn't find jokes on prominent politicians such as the prime minister. But now there are jokes on him. The party utilises the broadcast feature, one-on-one messaging as well as messaging on groups to reach out to its audience on WhatsApp. Humour is also possibly a reason why people forward content on WhatsApp. In the closely contested Bengal elections of 2021, given that the Trinamool Congress (TMC) was headed by an incumbent woman chief minister, some of the jokes circulating on WhatsApp in North India were found to be using humour bordering on the vulgar, targeting Bengali women.

With the advent of easily available artificial intelligence (AI) tools that can create "deep fakes, deep porn and synthetic media", the confusion amongst users on what is real and what is misleading or doctored is only going to increase (Newman, 2023). For example, a "deep fake" video of Ukrainian President Zelensky purportedly asking citizens to lay down their arms against Russia was circulating in March 2022. It prompted the real President Zelensky to come on video to debunk it on his Telegram channel (Allyn, 2022).

As in all other messaging, the timing of an issue is important. Creating content around a controversy or incident which could be politically useful would be pointless once that particular incident has passed from public consciousness. According to Ankit Lal, 72 hours is the natural news cycle beyond which it would be pointless to pursue it,

> So in that you have to be very, very active. If you don't push out the content within the first ten hours, twelve hours, then the content won't get that kind of a traction …. Our news cycles have become so small that some (other) new news comes

Of course, he says that "There's the legacy content which is like cartoons, around generic issues ... which is timeless" (A. Lal, personal communication, 20.12.2017).

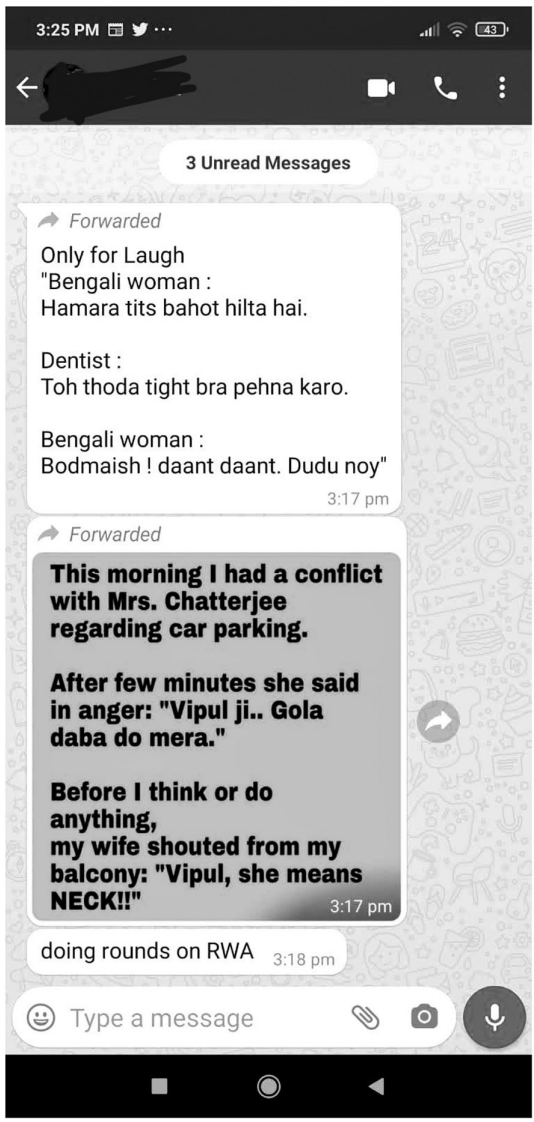
3:25 PM
3 Unread Messages
Forwarded
Only for Laugh
"Bengali woman :
Hamara tits bahot hilta hai.
Dentist :
Toh thoda tight bra pehna karo.
Bengali woman :
Bodmaish ! daant daant. Dudu noy"
3:17 pm
Forwarded
This morning I had a conflict with Mrs. Chatterjee regarding car parking.
After few minutes she said in anger: "Vipul ji.. Gola daba do mera."
Before I think or do anything,
my wife shouted from my balcony: "Vipul, she means NECK!!"
3:17 pm
doing rounds on RWA 3:18 pm
Type a message

**FIGURE 4.1** Sexist Jokes about Women from West Bengal Circulating on WhatsApp.

*Source:* Authors' screenshot

Asked about other ways to engage with people on WhatsApp, aside from humour, he said,

> One has to present the facts. There's always a three-pronged communication approach on our end – one is to talk about what the government is

> doing which is always a positive content, second, how is the organisation developing, within the organisation you say this person joined or this person commented about A and B whatever pro and the third is against the current establishment …. The third line of content is something in which the leadership doesn't take reaction. Generally, it's the volunteers or people like me who get into that.

Elaborating on this, he said:

> For example, in 2015 Assembly elections, Mr. Modi had said about us that these people used Pakistan ka map on their website, which was not our website, it was a volunteer-driven website called AAP trends, which used to call Google Maps and when you call the international version, it gives you a map in which Kashmir is shown as disputed territory. Then we put out our defence saying, sorry this is not our website, this is run by a volunteer. Then one of my friends went to the BJP's website; they had the exact same map, on their official website. And that was game for us. I mean, BJP had to come and clarify, they had to remove the name of Pakistan from the list of countries you could donate from.

Giving an insight into the use of a unique WhatsApp feature of voice note where one can record one's audio and send, Lal had this to say: "(Voice notes are useful) especially for people who are not very well versed with the language usage". He shared an observation about overseas Indians, particularly Punjabis settled in Europe, saying that the particular group uses voice notes rather than text for communication. Based on that insight, the party uses voice notes for communicating with them.

How do political parties manage to carry messages across to their constituents spread over many geographical and linguistic regions? Lal's response to the author's query was that in the initial years (AAP as a party came into being only in 2012), they were a "very North-India focused party". Only when they started working in Punjabi content for the Legislative Assembly elections in Punjab in February 2017 did they realise the potential of "local language usage". He recalls that after the Punjab elections, they called two meetings,

> one in Delhi for all the North India state teams and one in Bangalore for all the South India state teams. North India was fine, when I went to Bangalore, the biggest insight was that our Kerala Facebook page has a weekly reach of 3 million, and it posts only Malayalam content; our Tamil Nadu page has a weekly reach of one million, posts only Tamil content; our Hyderabad Facebook page doesn't have any reach but there is one guy who posts videos in Telugu on his personal timeline and he, on

> his personal timeline, has a reach of one million. So, by virtue of using the same content that we were generating in here, transforming the lines – transcribing it to the local language, making sure that the same banners are used in the local language lines, even for the videos, he used to do the transcription and all and it is even right now working very, very brilliantly for them. So that is one insight that we got, so now we have set up this active mechanism that we give the raw videos, raw banners to them and even the raw cartoons to them and then they use it in their local areas.

As per Lal, they have a "very decentralised" model for generation of content in local languages. Giving an example, he says:

> For example, this vapour gun thing that happened in Delhi today there was a trial in Anand Vihar (Trial of a vapour gun in an attempt to reduce pollutants in the air). Pictures were generated by us, but the content around it, each state team wrote its own content around it. The broad guidelines they take themselves by following the national Twitter handle, the line that it is taking or there is this set of twenty people, the core team. By following the line that these people are taking they take their cue.

Even the vetting of the content takes place at the local level and there is no "pre-verification" or "pre-censorship". In case of any issues with the content, the local person has to take responsibility. The party has also been "surprised at the kind of presence we (they) have in Kerala…. We had crossed 5 lakh likes during 2015 Assembly elections only, right now it's around 6.5 lakhs. On Facebook". He was however, not sure of the numbers on WhatsApp, though he did say they have a good network.

Another useful feature for political communication on WhatsApp which was pointed out by Ankit Lal was that of the content remaining in the users' device. He says:

> What WhatsApp has done is that even within drawing room discussions, you were able to show (the content) … received on WhatsApp. The advantage of WhatsApp being, that if you download the image or a video it remains on your phone, unlike Facebook and Twitter.

He also said that their team had gathered that what sets Indians apart from other countries is their propensity for "long messages". Perhaps because we are a garrulous nation, the average Indian likes to receive and forward long messages on WhatsApp.

### *The 2019 "WhatsApp Elections"*

Bearing out the importance of WhatsApp in politics, the 2019 general elections in India came to be called the WhatsApp elections. Spread over a crucial three-and-a-half-month period before the May 2019 polls, a study by the Tow Centre for Digital Journalism mapped over a million messages on some 1,400 WhatsApp closed groups to understand the phenomenon of political messaging (Bengani, 2019). The end-to-end encryption on WhatsApp gives its chats privacy and that privacy works for conversations with legitimate organisations, as well as nefarious ones. WhatsApp did introduce a feature where you could not be added to groups without consent in April 2019, but it was a little too late for these elections. Using WhatsApp group invitation links, the Tow Centre joined groups which had political themes such as "Mission 2019" or "Modi: The Game Changer" or "Indian National Congress" etc. They identified themselves, but refrained from contributing to any conversation. At the end of the study, they found that more than a third (35%) of all messaging consisted of forwarded messages that were not identified as such (the "Frequently Forwarded" notation came a little later). Most activity in these groups was aligned with the news events concerning the elections. Of the ten items that went viral, "a few of them were innocuous others were inflammatory" and one video at least was found to be two years old.

Giving an insight into how media, especially WhatsApp, was used during the 2019 national elections in India, Shivam Shankar Singh (2019) talks about the kind of preparation and analysis that goes on within a party prior to an election. In his book *How to Win an Indian Election: What Political Parties Don't Want You to Know*, he says that the task begins with an analysis of the constituencies to see which of them are favourable to the party or otherwise. This exercise is based on data about voting history, voter rolls, demographic details etc., combined with a ground survey, all run through programming codes. With this dataset in hand, party workers then conduct many surveys and focus group discussions with different sets of constituents to gauge their opinion. From all this churning, a campaign focus emerges which is then used to create slogans and messaging, depending on the targeted voters. Where Facebook and WhatsApp messaging are not available, SMS and IVRS are utilised to spread the party's line on an issue. But with WhatsApp, micro-targeting becomes much easier and community groups with similar concerns are created where messages tailored to them are forwarded. According to Singh, parties might even turn out to be projecting two opposing views to two different categories of voters, if their datasets so indicate, in the race to reach the wining spot. Politically expedient falsehoods are also amplified through WhatsApp and, even more worryingly, have a long shelf life, as per Singh. Amplification of biases is another cause

for worry, he says. However, being a political worker for nearly a decade and having seen from close quarters how political campaigning is being done in the last five years, he believes, "The Indian electorate is far from understanding the harm that data aggregation can do, and how conventional and social media combined with data is influencing their thinking in exactly the way that the powerful want". Philipose in fact expresses the fear that the focus of elections in the future could shift to personal data collection of citizens to enable forwarding of tailored political content to them (Philipose, 2019).

In a different take, during the run-up to the politically important state elections in West Bengal in 2021, Uttara Gangopadhyay profiles the use of popular songs adapted to inspire youngsters (Gangopadhyay, 2021). In her article "The Young and the Restless: New Age Election Campaigns", she says that right from the popular slogan for these elections – *Khela hobe* (or *Game On*) – electioneering witnessed a change, with adaptations of popular songs to create something that "lifts the seriousness" of elections, with even flash mobs visible. If *Khela hobe* came from the Trinamool Congress, the ruling party in the state, the opposition BJP came up with *Pishi Jao* (*Go Aunt*), which drew inspiration from *Money Heist*, a Spanish crime show popular among the youth. Even the "sober" and "serious" Communist Party, CPI-M, had a witty remixed version of a popular Bengali song *Tumpa sona* which went viral on social media. These songs circulated on WhatsApp and may have touched a chord with the Bengalis who have a great fondness for music.

In a reference to the importance of WhatsApp, Facebook and Instagram, the prime minister in his election rally in West Bengal on March 19, 2021, referred to the 50-minute outage of the platforms, saying "Last night, for 50–55 minutes, WhatsApp, Facebook and Instagram were down that left everyone worried!" Taking a jibe at the current government in the state, he said, in Bengal, development, belief, dreams have been down for 50–55 years" ("WhatsApp, Insta, & FB", 2021). Fears of polarisation of voters along communal lines with aggressive messaging on WhatsApp have also been voiced during these elections (Daniyal, 2019). Thus is Indian electioneering changed forever. In a pandemic situation, with restrictions on meetings, these virtual groups acquired a life of their own.

### *What WhatsApp Has Done to Prevent Misuse during Elections*

As per the Frequently Asked Questions section of whatsapp.com, the app maintains an open channel with the Election Commission of India, observing the voluntary code of ethics to help conduct free and transparent elections. WhatsApp trains political parties in using the app responsibly, as per the blog. Trainee party workers are made aware that their accounts could be banned if they send unsolicited messages to users, without ascertaining

their consent beforehand. WhatsApp says they continue to work closely with the law enforcement agencies and also provide them training on how to use the app. Since they have "no direct visibility" into messages, they "rely on behavioural signals from accounts and available unencrypted information/". However, they apply spam detection technology to prevent abuse. They also have a Grievance Officer based in India and release monthly reports in compliance with the IT Rules, 2021.

As detailed in the previous chapter, limiting forwarding messages, labelling of messages as "forwarded many times", disappearing messages in groups, having control over which group a user could be added to, leaving a group without notifying other members and greater admin controls were other steps taken by WhatsApp to keep their users safe from problematic content ("HelpCenter", n.d.).

### From Our Survey

Respondents of the authors' survey conducted in 2018 were asked two key questions on whether they believed they received propaganda on WhatsApp and whether they thought politically motivated forwarded messages were able to change their minds on any issue.

Of the student respondents, more than half (63% students) said they had been receiving propaganda through WhatsApp, with some of those based in the border areas of Jammu and Kashmir and Ladakh, saying they received such material "so many times". Over a quarter of all students (26%) believed that receiving such messages on the app had helped them change their minds. More than half the students (52%) based in Jammu and Kashmir and Ladakh were of the view that their opinions on issues had been changed after they read about them on WhatsApp. One student from the Union Territories said that though she is not influenced by such messages, she has observed her parents being influenced by politically motivated forwarded messages. Students from the Union Territories also said they believed content, politically charged or otherwise, coming from family and friends, was likely to be true.

Professionals and entrepreneurs spread over Delhi, Mumbai, Bengaluru, Vadodara, Gwalior, Pratapgarh, Prayagraj and Agartala were overwhelmingly of the opinion that they were receiving propaganda on WhatsApp (81%). The gender distribution among them was almost equal (14 men and 13 women), but of the 8 people (30% of those surveyed) who said such propaganda helped change their minds on issues, 7 were women.

The 22 respondents from the government sector were again well aware that they were receiving propaganda via WhatsApp (91%). However, most felt that such messages did not have any impact on their opinions. Only 22% said propaganda messages were able to change their minds.

Of the dozen teachers surveyed, all were aware that they were receiving propaganda on WhatsApp, but only a small percentage (27%) were swayed by such messages; all the others said such messages on the app did not change their minds at all. These were six men and six women in the age group of 31–52.

Among the armed forces, all, except two, that is 82%, said they had received propaganda material on WhatsApp. Some said they had received such material "several times", "frequently" or "most of the time" and most either deleted or did not respond to it. One said the propaganda received was on "country, religion etc.", while another said he received propaganda "related to political issues or companies". Eight out of 12 or 67% believed that such material had helped change their minds on issues "sometimes". All of those who said this were men.

## Conclusion

The last general elections held in India in 2019 were dubbed the "WhatsApp elections" (Bengani, 2019), highlighting how integral the messenger app is to political communication in India now. The BJP had a head start in using the app for political purposes, but other political parties were catching up. The WhatsApp feature of group communication is the key to pushing content to targeted audiences. Before WhatsApp gave the option of not getting added to groups in April 2019, one had no control over being added to sundry groups and voters found themselves added willy-nilly to them. Most content was aligned with news events concerning elections and some were even inflammatory and/or fake.

All in all, political communication has moved from the almost naive use of legacy media to a sophisticated exercise, carefully designed for social media. The campaign focus and messaging emerge now from a lot of datasets based on ground surveys, focus group discussions and other relevant voter data. In fact, scholars have expressed the apprehension that elections in future could shift the focus to capturing personal data of voters to understand their leanings and subject them to messaging designed to fit in with their political sympathies (Philipose, 2019).

Giving the authors some insights into WhatsApp usage in political parties, social media strategist for the AAP, Ankit Lal said, the feature of WhatsApp content getting stored in phones was a major factor in seeing so many forwarded messages. He also believed that messaging in regional languages will be the future; and that timing was crucial while dealing with the smaller and smaller news cycles in the world of social media. He said that countering any fake news detrimental to the party needs to be done as quickly as possible, as in the "golden hour" after road accidents. He also said that while creating content on WhatsApp, the use of emojis is encouraged. Lal said though

WhatsApp videos need to be less than 3 MB in size, the audio needs to be really good, as mostly people access WhatsApp on phone which have small screens, so even poor video quality comes across well. Also, he pointed out this quirk that Non-Resident Indians have, of using the voice note feature more than other users.

What has emerged is that content "factories" for WhatsApp were very real and worked in a coordinated fashion to create messaging that would resonate with voters and also capture the current events in favour of their masters, using humour and fear appeals mostly. The advent of AI tools for content creation has opened new ways to manipulate media so as to give a distorted sense of reality. The danger of such manipulated media creating mayhem cannot be ruled out. Political parties were not only using groups, but also broadcast lists and one-on-one messaging to push their content on WhatsApp. One could even find WhatsApp groups for sale.

However, India is not alone in this trend of social media, particularly WhatsApp, taking centre stage in political campaigning. Other countries where WhatsApp is prevalent like Brazil, Colombia, Kenya and Malaysia are also seeing such a pattern.

From the authors' survey, it appears that propaganda received via WhatsApp can have serious ramifications as it can help shape opinion on issues. Though overall respondents were clear that they knew when politically motivated messages were coming their way, they were still influenced by them. Students based in the Union Territories of Jammu and Kashmir, and Ladakh, expressed the most mistrust of the app, but were also highly susceptible to messaging being received on WhatsApp, with over half of them (52% of those surveyed) saying it helped change their minds on an issue. By contrast, only a quarter of students from other areas of the country said they believed that such messaging affected them. Another group that seemed highly vulnerable to propaganda was of the armed forces personnel, 67% of whom felt their minds had been swayed by forwarded messages on WhatsApp. The category of professionals/entrepreneurs also seemed vulnerable to propaganda at 30% of those surveyed, with more women than men falling prey to it. Teachers (27%) and government officials (22%) were marginally less susceptible to such messages, almost at par with the general student population.

The introduction of WhatsApp into the political arena with its features of easy media sharing, retention of media on the phone, group messaging and ease of use in sharing forwarded messages of unknown provenance and facilitating use across languages and geography has changed the way politicians and the public interact. However, the distinctive change that has been brought about with its use is the sense of intimacy in relative secrecy, in a country like India where there is hardly any privacy in real life. As Lal of the AAP has been quoted, "We wrestle on Twitter. The battle is on Facebook. The war is on WhatsApp" (Goel, 2018).

## Notes

1 More information at https://www.youtube.com/watch?v=_dYwybJeW-4. Retrieved May 28, 2021.
2 All numbers of Twitter followers as of March 31, 2021.
3 Details at https://play.google.com/store/apps/details?id=com.narendramodiapp&hl=en_IN&gl=US.
4 http://www.tbitechnologies.com/w/whatsapp-marketing.php. Retrieved May 30, 2018.

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# 5

# THE MENACE OF FAKE NEWS

## Beware the Forward

*It was the "board examination season" of 2021 – April, May – when the Class 10th and 12th exams of the Examination Board of Uttar Pradesh (UP) state traditionally took place. In Covid pandemic-affected times, the exams scheduled initially for the 24th of April, 2021, had been deferred without intimation on when they were likely to be held. For the 5.6 million students appearing for the exam in the state, it was an anxious time. The school-leaving 12th class exam is especially considered a make-or-break one for students in India. Among the anxious students keeping a watch on updates for new dates for the exams was 16-year-old Zoya who received a message on WhatsApp on May 17th saying that the exams were now scheduled to be held from June 5 to June 25, 2021. A similar message was received by her friend Anaya also who immediately called up Zoya. Anaya pointed out that there was a spelling error in the schedule which was making her doubt the veracity of the message. By then the message had gone viral on social media and caused a lot of anxiety among students. The UP Secondary Education Council secretary had to issue an immediate denial, which was followed up with a clarification from the secondary education department. But that one message had managed to trigger panic in the interim among millions of affected students like Zoya and Anaya.* (Jain, 2021)

### WhatsApp and Fake News in India

In July 2018, India's high circulation newspapers carried full-page advertisements titled "Together We Can Fight False Information" brought out by

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WhatsApp. The advertisement listed "tips to help you decide if something sent to you on WhatsApp is true", which included their (then newly introduced) feature to identify forwarded messages, advice to check messages that upset the user or messages that seemed unbelievable or looked "different". Users were also cautioned to check photos and weblinks for veracity, to check if that particular information was being circulated on other news websites and apps and if not, question its credibility. Other tips included a reminder of how a user could keep control over the kind of information she was being subjected to, by choosing to remain in a group or not, chat with someone or block them and by not sharing forwarded information unless they felt it was genuine. The advert ended with a reminder that "Fake news often goes viral" and exhorted users to not feel coerced into sharing messages simply because they received it multiple times as that does not make them true. In the end, WhatsApp urged that "To fight fake news, we all need to work together – technology companies, the government and community groups. If you see something that is not true, make people aware and help stop the spread".

The full-page colour advertisement in most leading English, Hindi and other Indic language dailies was the culmination of a long and arduous journey for the platform where it was being blamed by the government and citizens for a spate of hate crimes that resulted, it was felt, from rumour-mongering to downright malicious propaganda on social media, including WhatsApp. WhatsApp being a closed ecosystem, thanks to encryption, and also being one of the most popular and intimate social media platforms, bore the brunt of the blame (Baulch et al., 2020).

Just a week before, the Minister for Information Technology, Ravi Shankar Prasad had called on the platform to come up with technology-based solutions to check the spread of false messages on WhatsApp. He went on to state:

> What I have learned is that dangerous developments such as mob lynching in the name of child lifting are being provoked and instigated on many WhatsApp groups. Coordinating with different departments can help to (stop) spread the rumours and give police time to do their work.

The article was accompanied by a graphic depicting the WhatsApp icon's speech bubble pointer as a sharp-edged weapon murdering a man lying below (Khan, 2018).

The popular platform came under pressure following reports of lynchings in Maharashtra, reportedly triggered by fake messages on WhatsApp about the sighting of child-lifters in the area. The Central Government went so far as to give a warning to WhatsApp to regulate "irresponsible and explosive messages" on its platform and blamed those for triggering lynchings in

as many as five states: Assam, Maharashtra, Karnataka, Tripura and West Bengal ("WhatsApp Warned for", 2018).

In an in-depth series on the lynchings, the *Indian Express* newspaper reported that these were in fact spread over 9 states and resulted in 27 killings over a year (Rajput et al., 2018). Their reporters, spread over Dhule, Guwahati, Kolkata, Ranchi, Bengaluru, Chennai, Raipur and Hyderabad, found a common plot to all the 27 lynchings – "helpless police, migrant victims". The distinct patterns to the killings included – "the demographics of the mob, its nature of mobilisation, the profile of accused, the way rumours spread, the response of police and the legal process". It was in the spread of rumours that WhatsApp came to play a role. In some cases, the rumours about child-lifters, which were initially reported in the print media, were picked up by social media and then forwarded on WhatsApp; in other cases, the rumours first surfaced on WhatsApp. However it started, it was amply clear that WhatsApp played an instrumental role in the spread and amplification of these false messages.

While speaking to the *Indian Express*, police officers in areas affected by the lynchings lamented the spread of technology to areas where people do not have access to the tools to verify information they are receiving. The common thread of the composition of the mob carrying out these killings has been that of less-educated, unemployed young men, some of whom have been found to be under the influence of alcohol at the time of committing the crime. It is the classic tale of the poor, under-informed, unemployed youth who vent their anger against the system through violence against people they see as "the other". If they are also perceived as soft targets, the chances of them being attacked go up significantly, as the reporters discovered. Of the 27 killed over a year, 13 could be labelled as soft targets as they were mentally challenged or depressed or migrant workers or members of a de-notified tribe or nomads or visitors, according to their reports. WhatsApp added to the mix with its ability to spread false messages and rumours with speed and without detection. Even when no facts were presented to the mob confirming the rumour, they continued on their murderous path because discernment stemming from a more nuanced approach which could be formed through literacy, especially media literacy, was not part of their mental make-up. In fact, their unquestioning belief in everything on social media being true reminds us of the blind faith vested in news on print, radio and television when they were first introduced in India.

This study has investigated the phenomenon of fake news in India via WhatsApp. The methods used are analysis of a mix of secondary reports and published academic research, anecdotal evidence gathered from various users of WhatsApp, expert interviews and the respondent's answers to the survey conducted by the authors.

## Understanding the Terms: Misinformation, Disinformation, Malinformation, "Fake News"

There has been debate around using the term "fake news" to denote misinformation. As per Claire Wardle in *First Draft*, the terms "misinformation, disinformation and malinformation" are more appropriate to use to signify collectively the "information disorder" (Wardle, 2021). Those in favour of this view believe the term "fake news" carries with it "changing meaning" and is "recurrently used in the discourse of political actors mainly to discredit opposing ideas or parties, as a kind of weapon in the battlefield of contemporary political debate" (Baptista & Gradim, 2022). The British Broadcasting Corporation (BBC) is of the opinion that the use of the terms – misinformation, disinformation and malinformation, collectively the "information disorder" – classify such information on the basis of intent, but "judging outcome from intent is … no easy task". Also, the term "fake news" is one that the ordinary citizen understands and uses for all kinds of incorrect and misleading information, hence it makes better sense to use that. A recent definition attempted of fake news comprises the following: fake news is

> a type of online disinformation (1), with (2) misleading and/or false statements that may or may not be associated with real events, (3) intentionally created to mislead and/or manipulate a public (4) specific or imagined, (5) through the appearance of a news format with an opportunistic structure (title, image, content) to attract the reader's attention, in order to obtain more clicks and shares and, therefore, greater advertising revenue and/or ideological gain.
>
> *(Baptista & Gradim, 2022)*

## How Misinformation Is Spread

Diffusion of innovation theory is one framework to understand the process of spread of information, true or false. The concept of relative advantage by adoption of an innovation, along with compatibility or the alignment of the innovation with the potential adopters' values and experiences, ease of use and scope for experimenting from small to large scale are all factors that influence the diffusion process. However, an understanding of the social systems is required to study the process for barriers and tools to overcome them. Srivastava and Roy believe "The relevance of the diffusion framework is not limited to developmental contexts only; it can also be used to study the spread of ideologies and the spread of movements and rumours" (Srivastava & Roy, 2016).

As detailed in Chapter 2, the Uses and Gratifications theory also posits the users as being "active" in seeking out content that meets their needs;

and information that is in conformity with their belief system or supports their confirmation biases finds greater resonance. This helps in creating echo chambers and closed, encrypted platforms such as WhatsApp encourage the circulation of such information without appearing in the public domain.

Herman and Chomsky's propaganda model could also be a framework for looking at dissemination of information on social media, especially when it comes to fake news. According to them, systematic propaganda is pushed towards the masses as the levers of wealth and power are in the hands of a dominant elite. The "marginalization of dissidents" happens through the filters of media ownership, advertising, reliance on government, flak as a means of disciplining the media and anti-communism as a control mechanism. Though this theory was posited before the advent of social media, it still holds relevance as ultimately it is the dominant elite who manage to manipulate communication to their advantage even in the age of the internet and social media (Herman & Chomsky, 2002)

## The Pandemic and Fake News

The Covid-19 pandemic that brought the world to a halt made the authors take note of the kind of impact misinformation relating to health issues could have on the public. The word "infodemic" is not new (a word combining "information" and "epidemic" coined in 2003 by David Rothkopf) ("Words We Are Watching", n.d.) but in the context of Covid-19, it came into frequent usage and refers to the "rapid and far-reaching spread" of information that may or may not be true. This barrage of information where it becomes difficult to discern actual information about the disease from rumours or other mis- and disinformation is what is called an infodemic.

In a troubling finding, an international research report, authored by Roozenbeek et al. (2020) and published in the *Royal Society Open Science* journal says, "susceptibility to misinformation can be a significant factor in influencing people's behaviour during the Covid19 outbreak". This includes three types of behaviours such as reporting willingness for a vaccine against Covid-19, recommending vaccines to vulnerable others and also compliance with public health measures like wearing masks, social distancing, washing of hands etc. The authors conclude:

> We present the results of an international study, integrating previous research about predictors of belief in misinformation (both in general and specifically about COVID-19), and, in turn, how susceptibility to misinformation about the virus affects key self-reported health behaviours. In summary, while belief in misinformation about COVID-19 is not held by a majority of people in any country that we examined, specific misinformation claims are consistently deemed reliable by a substantial segment

> of the public and pose a potential risk to public health. Crucially, we demonstrate a clear link, replicated internationally, between susceptibility to misinformation and vaccine hesitancy and a reduced likelihood of complying with public health guidance.

In India, the problem of fake news became such a menace that the Indian Supreme Court voiced the apprehension in March 2020 that "Panic (caused by fake news and misinformation) will destroy more lives than the coronavirus" (Anand, 2020). The government counsel present at the same hearing also expressed the opinion that fake news was "the single-largest problem" confronting the Centre in the wake of the pandemic. At this, the court ordered the creation of an expert panel for spreading authentic information and also called for criminal prosecution for those spreading misinformation.

Fake news relating to the pandemic also figured in the prime minister's speech in May 2020 when he addressed the Non-Aligned Summit where he spoke about terrorism and fake news in the same breath. Addressing the heads of state and government of over 30 countries, Narendra Modi said, "Even as the world fights Covid19, some people are busy spreading other deadly viruses. Such as terrorism. Such as fake news and doctored videos to divide communities and countries" ("At His First NAM Meeting", 2020). Instances of the so-called health advice to combat the corona virus flooded WhatsApp and other social media platforms, sometimes leading to disastrous consequences. There were claims that were possibly not as harmful such as those of alcohol helping prevent/cure Covid-19, some of which were meticulously created using fake letterheads and stamps of reputed organisations ("Can Drinking Alcohol", 2020). Then there were also claims that had led to harm like the ones that prompted people to ingest bleach and other disinfectants, and the BBC estimates that misinformation like this caused 800 deaths and 5,800 hospital admissions globally in the first three months of the pandemic (Coleman, 2020).

One example of misleading news relating to the pandemic was the promotion of "Coronil" by yoga guru, Ramdev's Patanjali Ayurveda, initially touted as a "cure" for Covid-19 in June 2020 which ran into controversy as there was no clinical trial data to back its claim. Then a second "launch" of the same product was held in January 2021 with the claim that it was "certified by WHO" (World Health Organisation) and also approved for use by the Ministry of AYUSH, Government of India. The WHO South-East Asia quickly distanced itself from the product through a tweet saying it had not certified any traditional medicine as a cure for Covid-19. The Ministry's approval also had come only for the use of Coronil as a supportive treatment for Covid-19, which Patanjali was forced to acknowledge and give clarification about ("Patanjali Clarifies", 2021). However, the company sold "Coronil kits" worth Rs. 250 crores (US$34.4 million approximately)

within four months of its initial launch. The initial launch was marked by memes and messages showing Baba Ramdev and Patanjali in a favourable light over scientists etc. in coming up with a "cure" for Covid-19. These were shared and forwarded many times over in millions of WhatsApp groups and other social media platforms. Giving them legitimacy was the presence of Indian ministers during the product launches. And of course, the inherent bias towards indigenous medicine systems' ingredients which Coronil claimed to have used to create it. The Indian Medical Association in a strongly worded statement came down heavily on the Union Health Minister for being present at the launch of Coronil, reminding him that as a physician, he was bound by the code of conduct which prohibits any medical doctor from promoting any drug ("IMA Slams Harsh", 2021).

Meanwhile, WhatsApp messages about how the prime minister's exhortations to clap, clang bells etc. as a measure of gratitude to emergency service workers on duty during the pandemic in India would help exorcise "evil energies" were circulating among the populace in March 2020 ("Clap, Whistle, Ring", 2020). The messages claimed that the "cumulative vibrations" from the sounds in the evening of March 22, 2020 (evenings being a time when such evil energies are supposedly at their peak) and on a moonless night or *Amavasya* (of significance in Hindu mythology), positive energies would be encouraged and that would make the virus implode and obliterate itself. Forwarded messages of *gau-mutra* (cow urine) drinking parties being held also flooded inboxes. *Gau mutra*, coming from the cow, considered holy by Hindus, was said to have excellent curative powers, even against the coronavirus ("Hindu Mahasabha Holds", 2020). The provenance of most of these messages was unknown. Soon after the imposition of a countrywide lockdown from March 24, 2020, messages on WhatsApp kept circulating encouraging hoarding or with messages meant to uplift the depression of being locked at home such as the one where each person in a WhatsApp group was supposed to place a positive word in a digital jar. Once the lockdown was slowly lifted, other messages urging one to take extra precaution in dealing with those moving from one location to another such as household help etc. started doing the rounds, as well as of "sure shot" ways to keep the coronavirus away.

April 2021 saw a second wave of the Covid-19 virus in India which spread like wildfire, seeing a jump in infections. As the overstretched healthcare system buckled under the load of persons needing RT-PCR tests, oxygen, medicines such as Remdesivir or hospitalisation and ICU beds in many states, WhatsApp groups also exploded with new messages. Some were genuine giving information about hospitals, medicines or ambulances, while others were false.

In other instances of medical misinformation leading to problematic health behaviours, there was the case of a man in Bengaluru who fell prey

to a scamster on WhatsApp and tried to sell his kidney for Rs. 1.6 crores ("Man Falls for WhatsApp", 2018). The menace of health-related fake messages circulating on WhatsApp is not something to be taken lightly, say medical professionals. Some are innocuous, though without basis in fact, such as the ones advising women to not wear black bras when they go out in the summer and place a *dupatta* or scarf when under the sun to avoid breast cancer (Dhar, 2018). But other more difficult to counter are ones that imply that having a biopsy would actually cause cancer, leading to patients refusing to undergo the vital procedure.

According to Dr Sumaiyya Shaikh, a health misinformation researcher and author, there are four categories of people who are likely to be "purveyors" of such misinformation – wellness industry giants/alternative medicine practitioners and spiritual gurus as well as government, which she puts in one category. Among the other three are – social media influencers who spread misinformation with "'the good intent'", concerned relatives of a patient and others with vested interests (Sinha et al., 2019).

Among the widely circulated non-medical fake messages was the one that said an earthquake measuring 8.2 was to strike North India at 7 p.m. on a day in January 2018 as per NASA predictions. This particular message spread panic even among well-read people in many circles. The supposed picture by NASA showing the Indian subcontinent lit up on *Diwali* day so as to be visible from space, declaration by UNESCO of India's national anthem being the best in the world, the ISIS group that one can't exit if one accepts their invitation to join, ISIS likely to misuse your WhatsApp display picture so better to have none, and on and on; fake messages have been flooding our WhatsApp inboxes with impunity (Rizwan, 2017).

### What WhatsApp Has Done to Counter Misinformation

On its part, WhatsApp, according to its Frequently Asked Questions section, has taken a number of measures to fight misinformation such as putting a limit on forwarding messages, so that one can only share it in up to five chats, or only one group at a time if it carries the label of a "forwarded" message. If some message gains virality and is labelled "forwarded many times", you can only share it in one chat at a time. Also, WhatsApp allows users to block accounts and report them if they seem problematic.

The one feature that has helped many to avoid being added to random groups is one where users only allow "group invites" and cannot be added to groups without consent. Administrators of groups can now decide who can and who cannot post messages in a group. Disappearing messages can also be activated in groups starting from within 24 hours of being sent.

Specifically for fact-checking, as of April, 2023, WhatsApp has developed a bot, enabled through its API-platform solution where information

can be verified through ten fact-checking organisations accredited to the International Fact Checking Network (IFCN). Users have to just send a "Hi" to +1(727)2912606 to get a message or get their information verified. They have also launched public education campaigns such as "Share Joy, Not Rumours" and "Check it before you share it" ("Help Centre", n.d.).

However, a "Hi" sent to the number only gave the options of locating fact-checkers and fact-checks and not information verification sent in by users. Even the fact-checks did not get sent when tried by this author in June 2023. The WhatsApp tipline (9643000888) operational earlier appeared a better resource, but it seems to have been discontinued.

The idea behind these steps was to basically stem the flow of problematic content by making it harder to share it and encouraging the public to be mindful of groups they are getting added to as well as thinking before forwarding. However, these have not proved enough.

## Review of Research

In a classic work, *Propaganda and Persuasion*, authors Jowett and O'Donell (1992) describe propaganda to be "the deliberate, systematic attempt to shape perceptions, manipulate cognitions and direct behavior to achieve a response that furthers the desired intent of the propagandist". Some of the fake messages circulating on WhatsApp can be classified as propaganda when it seems part of a concerted or systematic effort. This seems to be the case of election-related WhatsApp messages that favour one or the other political parties.

The British Broadcasting Corporation conducted a one-week study in late 2018 (Chakrabarti et al., 2018) of social media (including WhatsApp), covering 80 respondents in three countries – India, Kenya and Nigeria. Though fake news as a phenomenon was a disturbing trend in all three countries, in Kenya and Nigeria, the driving force behind it was "national anxieties and aspirations", as also scams, whereas in India it was "nationalism". In Nigeria, terrorism and the armed forces also motivated people to spread fake news ("New BBC Research", 2018).

The study involved an in-depth look at the kind of materials being shared by the participants and with whom. The central question for the study was to investigate why people shared fake news without verifying it. According to the authors of the report, the most circulated fake news messages manage to bypass "critical filters" if they reference one's sociopolitical identity. Thus, "validation of identity trumps verification of facts". This is a crucial discovery because with all the fact-checking tools at hand, if people are not going to use them when they find "fake news", it will become extremely difficult to stop its spread. The biggest instrument to fight fake news is critical thinking on the part of users and if that is obscured, the fight against fake news

becomes that much harder. The study highlighted the sheer volume of right-wing messaging at least in the phones of respondents they had access to. In comparison, left-wing messaging was not as much. Four types of narratives have been listed as being the "most effective" in bypassing critical filters in India – "Hindu power and superiority, preservation and revival, progress and national pride and personality and prowess (of Prime Minister Modi)".

Also, it was found that with the flood of information being received, users were not very discriminating in forwarding messages and did not make much effort to find the original source of any messages. The main criterion for deciding to share any message was either the kind of images received or who sent them. Among other reasons that the BBC study (Chakrabarti et al., 2018) "Duty, Identity, Credibility: Fake News and the Ordinary Citizen of India" found was circulation of fake messages in groups in the hope of verification. As much as 37% of the messaging on WhatsApp fell under the category of "Scares & Scams" and often these were found to be circulated in groups for verification, though not overtly.

Conditions such as a blurring of boundaries of various kinds of news, loss of faith in media regarding their motivations, information overload, images trumping text, faith in the sender, not knowing the source, "'feel' over 'think'", etc. – are necessary for the spread of fake news, the study postulates. And then people share "to verify" or as a "civic duty" or for "nation-building" or as an "expression of one's sociopolitical identity", the last being a key factor. According to the study, even those with high awareness about fact-checking are found to share false information if it matches with their sense of identity. However, all is not lost, "there is some use of fact-checking". The worrying aspect of the problem is the indication that there might be "dense interconnections" on one side of the political spectrum which seem to aid in circulating fake news.

Terming "fake news" as a "social problem", the BBC study advocates a coming together of all stakeholders, including citizens, to tackle it and also urges journalists to investigate further and find out if organised ecosystems of producing and spreading fake news exist.

An excellent study done by Factly Media and Research (Factly) and the Internet and Mobile Association of India (IAMAI) titled "Countering Misinformation (Fake News) in India: Solutions and Strategies" (Dodda & Dubuddu, 2019), outlines the issues people are dealing with in detail. In September–October 2018, they conducted a web survey which was attempted by 1,286 respondents, of which 891 completed the survey. Some of the key findings of the survey were that those most likely to spread fake news were either those below the age of 20 (young) or those over the age of 50 (old), and those new to the technology were found more susceptible. Newspapers still remained the top choice while looking for information, but trust in mainstream media has declined, which is leading people to share

information on social media. Neutral media and fact-checking organisations have greater credibility overall, as compared to others. People believe information when they have background evidence and trust in organisations/persons. Only when they are pushed to do so, do people verify information, and in fact, a sizeable number are not aware that fact-checking organisations exist. However, when multiple organisations debunk any fake news, the probability of it being correctly identified by people goes up.

About 30 semi-structured interviews were also conducted as part of the (Factly and IAMI) study, during August–November 2018, with important representatives of all stakeholders. Those interviewed were of the view that there is an urgent need to stop using the term fake news and develop a "standard glossary" for information manipulation. One of the key factors identified by them as to why people share unverified information was "the need to be part of a group and social acceptance within their networks". The platforms most responsible for the spread of fake news, according to them, are WhatsApp, Facebook and Twitter. Some of the blame for the spread of fake news was attributed to political parties by the interviewees who felt they were spreading content that suited their campaign agenda, regardless of the veracity of the information. Many people share content just because it is available, driven by social groups of which they are a part. Data and Digital literacy are the two barriers that hamper such people from verifying content. A few people of course spread propaganda which could be related to their "bias, revenue generation and easy access to technology". Some of the blame lies with media houses too which create one-sided content in line with their business or other interest and report information without due diligence, thereby adding authenticity to fake content.

The study gives its recommendations for various stakeholders. For the government, it recommends a push to digital literacy; capacity-building in governance to enable political and bureaucratic leaders to understand the complexity of issues at hand; an exclusive section of the Indian Penal Code to curb hate-mongering under criminal justice so that the government is equipped to control polarisation or hate and implicate "bad actors"; and data protection and accessibility.

For technology platforms, the study recommends that they need to invest in "large-scale capacity-building" to staff offices in India, especially their public policy and grievance teams; also, the importance of being accountable, and transparent, as also compliant with regulatory national and regional administrative bodies; along with a localised telephonic helpline and local language access and moderation.

For the media, the study says they need to display responsibility while dealing with public information; staff capacities in handling digital technology need to be vetted before hiring and adequate training in fact-checking given; with recreation of a robust editorial system for verifications at multiple

levels. This needs to be complemented with a move towards diversity in the media "both in terms of people and opinions" to encourage healthy competition and strengthening of self-regulatory bodies. Lastly, the study advocates commissioning research in the intersection of human behaviour and technology, allocating funds for those examining the information disorder, training in journalism schools on methods of verification etc. when it comes to academia, civil society and discourse.

Some articles published in reputed scholarly journals have hinted at the various reasons of susceptibility to misinformation. In a paper "Reliance on Emotion Promotes Belief in Fake News", the authors highlight the role of emotion in increasing susceptibility to fake news (Martel et al., 2020). The exploratory study shows that "emotion plays a causal role" and that "people fall for fake news, in part, because they rely too heavily on emotion". This also implies that for reducing such belief on fake news, efforts need to be made at making "public less emotional consumers of news media".

WhatsApp had also invited proposals for grants for the study of misinformation on the app from "any social and technological perspective" (WhatsApp, 2018). In a 2021 US study (Sundar et al., 2021) awarded the grant, it is suggested that "richer modalities like audio and video" can make people more susceptible to fake news. Another research study from Argentina and Brazil shows that when the public already have "less trust" in their political system, and they are politically polarised, they are more susceptible to misinformation (Lupu et al., 2020). A study undertaken in Indonesia, published in 2020, comes to the conclusion that women in that country use WhatsApp to "support their existing social relationship" and misinformation reaching them via friends/school alumni groups (the biggest source of fake news) was mostly ignored by them as "Indonesian women tend to avoid argumentation with other members" (Novi et al., 2020). An interesting way of countering misinformation was suggested by another research study which demonstrated the effectiveness of playing the "fake news game" to help people get "inoculated" against fake news. The game "boosts people's confidence in their own judgements" and hence dissuades them from sharing "false content" (Roozenbeek et al., 2021). Such studies have brought a richer understanding of how the messaging app impacts us.

A 2021 report from the Reuters Institute for Digital Journalism based in Oxford University says that in the time of the Covid-19 pandemic, people are depending even more on social media for news. In fact, for 63% Indians, online, social media is a source for news. Of these, more than half (53%) are finding news through WhatsApp and along with YouTube and Facebook, WhatsApp has also "serious problems with misinformation and hate speech" (Newman et al., 2021).

The *Royal Society Open Science* journal published an article in October 2020 titled "Susceptibility to Misinformation about Covid-19 around the

World", authored by Roozenbeek et al. This gives insight about how misinformation has affected key health behaviours during the pandemic in five countries, namely the United Kingdom, Ireland, the United States, Spain and Mexico (Roozenbeek et al., 2020). The article lists the "predictors of susceptibility to misinformation" that have been identified so far. According to the article, exposure to information on social media (given that fake news is found to be circulating more on social media) is likely to make users more susceptible. Also, "political conservatism is associated with a slightly higher susceptibility to misinformation". However, in respect of older individuals, the research opined that "while older individuals are less susceptible (to misinformation), they still share more fake news for motivations other than accuracy (e.g. political gain and social consensus)". They say:

> We highlight the key role that scientists play as disseminators of factual and reliable information, as well as the potential importance of fostering numeracy and critical thinking skills as a way to reduce susceptibility to misinformation. Further research should explore how digital media and risk literacy interventions may impact how (mis)information is received, processed and shared, and how they can be leveraged to improve resilience against misinformation on a societal level.

Digital literacy is a concern that Pratik Sinha also raises. Sinha runs one of the earliest Indian fact-check websites called *Alt News* (altnews.in) and has been an advocate of including fact-checking as part of the curriculum in educational institutions. Sinha says, "Low digital literacy is one of the reasons helping misinformation campaigns" ("Accountability Must for", 2020). He has also expressed concern that mainstream media is falling prey to fake content on social media. Among the first members of the IFCN in India was *Boom* which is another popular fact-checking network in India ("About Us", n.d.). In an interview, Jency Jacob, the Managing Editor of *Boom* says, that WhatsApp is one of the most insidious platforms for spreading misinformation and disinformation ("YouTube: Making Sense", 2020). His advice is that people should not go on to WhatsApp for the purpose of news, as the platform was not built for news. When asked why people forward fake news content, he says it is the trust factor – one, that people have lost faith in legacy media; and two, the trust that people place in those forwarding such content. As a fact-checker, he mistrusts any content sent to his team when – (a) they don't get "adequate sources" for it; (b) when they are not able to get a primary source to verify it; or (c) if they lack a "100% confidence" in their editorial judgement that the content is genuine. Determining viral fake content has become easier over the years, in his opinion, as content floating on WhatsApp is also getting shared across Facebook and Twitter etc., giving it a "multi-platform virality". Anything shared over 100 times on Facebook,

in their definition, is a "decently viral post". Among other fact-checking websites that are popular in India are Health Analytics Asia which focuses on health misinformation and AFP fact-check (https://factcheck.afp.com/). Given the rising number of users in Indic languages, fact-checking websites providing options in regional languages have also come up, *Vishvas News* being one of them (vishvasnews.com) which provides this service in English and ten Indic languages.

Professor (Dr.) Anubhuti Yadav, who heads the New Media department of the Indian Institute of Mass Communication, believes that "journalists now need to equip themselves with digital skills because the emergence of new technologies have not only changed the way content is being produced but also the content consumption behaviour of the audience. People want to consume content in a wide variety of forms. Hence journalists should know how to package content in audio, video, infographics or immersive story format. There are a lot of tools available for content creation as well as helping them to verify content before publication." She adds that another pressing requirement "in the digital era is that there are a lot of digital tools which need to be added to the media curriculum and these include tools for verifying all formats – image, audio, video" to help stem the tide of misinformation. (A. Yadav, Personal communication, 30.06.2019)

In fact, the growing concern over Health misinformation has led to organisations such as DataLEADS to come up with a fact-check training program for journalists. The initiative is called "Fact & Fit – Combating Medical Misinformation in India" and is working towards building a Health Fact-checking India Training Network. Google News Initiative and Boom are supporting the initiative under which Training of Trainers (ToT) is imparted to select academicians/journalists/medical practitioners and they in turn conduct workshops for practicing journalists.

However, a recent study by the London School of Economics' researchers, Shakuntala Banaji et al. (2019), "suggests that there is no straightforward causal connection between levels of functional media literacy and the sharing of misinformation" (Banaji et al., 2019). The study rather recommends promotion of "critical media literacy", which makes meaning of the "power struggles" in media representation. Besides, the study has other recommendations, including placing hate-mongering at par with child exploitation by technology companies.

With the advent of easily accessible artificial intelligence (AI) tools such as Chat GPT and others, the peddlers of fake news have gotten a fillip. Deep fakes created with AI are so real that it is difficult even for aware users to distinguish them from the original. Shivam Shankar Singh and A. Venkatanarayanan are calling these "reality creation devices" and believe that these are going to muddy the information pollution waters even further. They suggest something like a "'Cognitive Security Therapist'" who could

help them consume a "healthy diet of information" through their analysis of our digital information environment. This therapist could actually be a real person or a tool, they suggest (Singh & Venkatanarayanan, 2021).

## Survey Findings

### *About the Survey*

The authors' survey elicited responses from 205 persons spread across the geography of India, covering cities such as Delhi, Mumbai, Bengaluru, Lucknow, Allahabad and others. The categories of people surveyed comprised students, teachers, professionals, government officials, armed forces personnel, housewives and foreigners temporarily residing in India. Of the respondents from India (not including foreigners in India), there were more women than men (101:83) and the largest category of respondents consisted of students. Among students, nearly a quarter were from the Union Territories of Jammu and Kashmir and Ladakh, which share borders with Pakistan and China.

### I. Students

The students surveyed were mostly from the field of mass communication and numbered 107, spread over Delhi, Jammu and Kashmir, Ladakh, Varanasi, Prayagraj, Pratapgarh and Lucknow. They were mainly postgraduate students who were broadly in the age-group of 20–25 years.

#### *Response to Forwarded Messages Seeking to Change Their Minds on an Issue*

Most students said that they do not change their mind or their stance on any issue when they receive such forwarded messages; Jatin, 24, saying emphatically "Never did, never will". But there is a fraction which is not too sure, with a response saying "Not really". Keeping in mind that most of the students who responded had a background in media and communication, those who said they did not outright reject forwarded messages on WhatsApp, said they often tried to check the veracity of any forwarded message that was of interest to them, which meant mostly that they "googled" the news or opinion.

Kamna Lakaria, 20, makes no comment either way but says, "Sometimes people share really good opinion". Navneet and Anshuka Duggal claim they do not read forwarded messages at all, while Anubha Mehra says she does not use WhatsApp for "forming an opinion", though she might change her mind "depending upon the issue in question" Kritika (name changed) says she did not believe forwarded messages, but they helped her know "what is

being talked about or what is trending". Mallika Dutta says though she does not believe in most forwarded messages, "Some mind provoking images related to gender and cultural identity may make me more aware, but I don't buy them 100%". Anamika Pandey says she could change her mind on an issue based on a forwarded message "Depends upon what the forwarded message has in it. If it is about bringing a change for the betterment of society (social message) I do ponder over it". Similar is Kshitij Kumar's view who says, "Skeptical approach does save me from believing anything right away. However, I've seen myself reacting to the issues of blood-donation, student-specific issues that I personally believe in, and so, they might have the tendency to at least affect my mood". Ruhamita Banerjee says, "Being a student of mass communication and journalism, I can say for certain that it does not. However, when I was initially introduced to the app, there had been instances (when she believed)". Aditi echoes the sentiment of being able "to differentiate between things and not letting stuff affect me" as she is "a media student".

Some said they do not trust content floating on WhatsApp and hence were not swayed by them. Harshaa says, "most of them (forwarded messages) are fake news". Shreeya Upadhyay says she "believed through a video that Ashirwad Atta has plastic in it but later this fake news was busted by the brand itself, informing public through advertisements that it is glutton (*sic*) (gluten) and not plastic". Manita (name changed) goes as far as to say "the information presented is unverified and almost always nonsense". Gagandeep Kaur articulates it thus: "I've never found WhatsApp as a trustworthy medium for formulating opinions on issues".

The lone person who admits to being totally influenced by forwarded messages on WhatsApp, Rajan Jayasawal however tags on that "it is not good for me b/c (because) before studying any matter we should not believe on any opinions/forwards that usually come on WhatsApp".

### *Propaganda on WhatsApp and How to Counter It*

Most students seem to be aware that they have been receiving propaganda through WhatsApp, especially during election time. Again, it must be emphasised that these are students who are pursuing mass communication and are expected to be more media literate than the general student. Hence, they are better equipped to deal with it. As Vaishnavi Jha puts it, she received propaganda from X party during elections and her response was to not vote for that party!

The main ways suggested by the students to counter such propaganda are (1) ignore it and not forward, (2) delete it, (3) make others aware of the false claims, and (4) block or mute the person sending such messages. Piyush Kumar says he has received "messages spreading hate, violence,

distorted videos etc." He believes in sending a response to the sender herself/himself with "actual facts". Gagandeep Kaur, who says she receives "a lot of politically and religiously heated content", believes one should not "forward blindly", rather "read the message and understand that not everything is truth. Verify the facts if something really catches your attention and as a responsible netizen, then decide if you wish to spread the message among family and friends". Jasmeet (name changed) says she also has received propaganda "especially communal messages and audio clips against minorities, which is heightened during sports matches b/w India and Pakistan in my opinion". Her very mature response is as follows:

> There is no good response to such propaganda because it will never reach the point of origin. It will impact only the person who sent the message while the message has impacted the entire grapevine. The best response is to write a message about how the propaganda is offensive and then block the person who chose to spread hate.

Manita (name changed)'s advice is that if the content is "alarming, in the sense that it incites violence, report them to the police".

Mahima says she has received propaganda "mostly on family WhatsApp groups, being shared by those who are 35+ (on average). About a political leader, party and sensitive issues". Tulika (name changed) says, "Even jokes targeting any political personality carry an agenda". Kritika (name changed), on the other hand, says she has received "subtle messages regarding what the government is doing or not doing … as forwards".

Shyna Singh says, "if you believe in the cause, take action, else ignorance (*sic*) is free of cost!" A similar sentiment is shared by Om Prakash who says "Kaam ki ho (toh) aage badhao" (translation: Spread it ahead if it's of any use).

### *What Can Be Done to Stop Fake News on WhatsApp?*

The suggestions for countering fake news on WhatsApp given by students in Delhi can be summed up as follows:

(1) *Technical:* Like developing a watermark for proven fake news (Madan [name changed]) or having a "'verified' tag where people vote its credibility as it is passed along" (Harshaa) or having an ID for every message to help identify its source (Rishi Anand Verma) or WhatsApp should become a paid app or have third-party fact-checkers (Rhea Guiliani, Mallika Dutta) or "limit the number of messages you can send" (Ananya) or "a review or rating system which can help people to rate" for "all the

forwarded messages" (Nausheen Iqbal) or "limiting the number of forwards" (Ruhamita Banerjee).

(2) *Social:* Encouraging media literacy "especially the older generation" (Yamini [name changed]) and learning to ignore such messaging.

(3) *Regulatory:* Facility to report message content (Adya Rajshri) or have DND (Do Not Disturb) registry facility (Jaya) or categorisation of content being shared on the platform by WhatsApp itself into "General, News, Irrelevant, Conjecture etc." (Namrata Nandgiri) or "stricter response to fake news and harsher punishments for people who forward nonsense" (Manita [name changed]) or "ID checks for registration on WhatsApp" (Jaya)

Priyanka (name changed) suggests the need to promote other platforms such as Google classrooms etc. for students to help in "eradicating the factor of WhatsApp being necessary". These other platforms would not be as susceptible to fake news, she feels. Anubha Mehra believes merely identifying a message as being forwarded is not enough because one can just copy and paste the message, "and/or remove an emoticon/punctuation to send it out again". Kshitij Kumar advocates admins having a stronger role in groups. He says, "a lot of things can be sorted if admins are intelligent or sensible enough, to also provide supplementary articles to support/oppose the forwards".

Apurba, 22, a student at the Jawaharlal Nehru University in Delhi, says she receives no forwarded messages that are politically motivated, so the question of their changing her mind does not arise. She does believe that "it influences the views of people on certain subjects and might cause them to become biased". She thinks the best way to combat it would be "to advise people to not believe everything they read on WhatsApp. Before drawing any conclusions, one should read up on the subject from reliable sources". Rohit Singh from Allahabad suggests that one should "read it (forwarded message) fully before forwarding" to curb the menace of fake news. Ravi, also from Allahabad, says, "There are messages related to different types of politics every day on WhatsApp but I do not believe them to be right until it is completely confirmed". Students from the Banaras Hindu University (BHU) in Varanasi advocate different approaches to countering the menace of fake news – think before sending (Amit/ Sudha), separate helpline for WhatsApp where one can check the authenticity of information being circulated (Manoj), banning such messages (Bipin), punishing those circulating such messages (Kalyani). All of them are of the opinion that motivated forwarded messages do not change their minds at all, except for Kalyani who says she has changed her opinion after receiving such messages.

*The Case of Students from the Union Territories of Jammu and Kashmir and Ladakh* needs to be studied separately as they are from a region which is considered a "difficult area" as it adjoins India's borders with Pakistan and China. Ashish, 22, believes "As J&K is conflict state, so most of the times

we get propaganda news content". Of the 23 surveyed, in this category a little less than half were emphatic that they do not get swayed by such forwarded content received via WhatsApp. The remaining said they are sometimes persuaded by forwarded messages; of these, five felt that forwarded messages helped change their mind *every time*.

One reason that was given for not believing forwarded messages was mistrust of WhatsApp or social media overall. Karishma, 22, flatly says "I don't trust social media that much". Manu from Jammu does not believe forwarded messages on the app "because it is merely a stupid phenomenon of playing with human psychology". However, she says, "some videos related to building self-esteem and to change the mindset of people related to some taboos changed my opinion about some issues". One reason given by the ones more susceptible was that they could believe in those messages as they were mostly forwarded by people they trusted. Satuti Abrol, 22, from Jammu says though her opinions do not change with forwarded messages on WhatsApp, "it changes the mentality of my parents". Aaquib Rangrez from Srinagar says he likes "objective content, which is completely unbiased and not fake" on WhatsApp. He adds that though forwarded messages do "not so often" change his mind on any issue, "a few spiritual and educational WhatsApp groups have had an impact on my mind somehow".

When asked how they felt misinformation on WhatsApp could be countered, most said the best way to deal with it was to ignore it. Some advised checking the authenticity of information received (Vinica): Mehaish Chand recommends that "WhatsApp needs to fix the number of messages and calls per day so that people do not misuse it". Kajol Saproo from Jammu says, "If it is a group, just exit it as there is no fun of arguing there. And if it is the concern of a single individual, we have to finish it by chatting with that person and clear all his doubts". Monika, 22, from Jammu says, "we are moving towards the world of misinformation. Only we can stop it. All these apps are for making lives more easy, not complex". Apoorva also cautions for greater vigilance with regard to authenticity of forwarded messages received on the app and says, "WhatsApp is a good messaging app and it should be used to connect with each other rather than sending hate messages against any caste, community etc." Saqib has a similar take, saying "(WhatsApp) can be a useful tool for the dissemination of information. But we have to be careful of those trying to misuse its reach and impact to spread biased, wrong and hateful information and news". Manu adds, "WhatsApp is an application owned by Facebook; after the Facebook scandal somewhere we feel a little unsafe to use the application".

## II. The Armed Forces

Officers who responded to the survey seemed quite aware of receiving propaganda via WhatsApp. Except for 2 out of the 12, all said they have

been getting forwarded messages as propaganda through the app. Lt. Sonia Dahiya of the Indian Navy says she has received "many forwards related to country, religion etc.". Similarly, Ravi (name changed) from the Indian Air Force says he has received propaganda on WhatsApp "especially related to political issues or companies". Major Yuvavir Kadyan of the Indian Army says, "a lot of forwards are part of a propaganda and can be easily identified". Maj Kadyan, however, says that these do not change his mind on issues "unless they are from credible sources". Vijay (name changed) from the Indian Army says such forwarded messages change his mind "for shorter period sometimes". Sushil Malik believes such messages do not exactly change his mind, "but definitely make me think on the issue". He says, "It is better to counter it (propaganda) by giving clear facts and sharing it with others". Lt. Col. Varun Bhartiya has a different take; he says, "No response – no forwarding and no reply" as well as deleting the message (pictures and videos) would be a good response to forwarded messages on WhatsApp. Vijay (name changed) has a more forthright way of putting it; he says, "(a) Don't share further (b) Use your own brain". Lt. Sonia Dahiya has a more nuanced approach to handling the issue. She says "Do not react, judge the issue yourself, create your own opinion, search, talk about it but just don't believe what has been spread or do what the message asks you to do". Other responses are "Leave it" (Wg. Cdr. A.P. Kumar), "let it be" (Sujay [name changed]), "Delete" (Wg. Cdr. G. Pradeep Nair/Lt. Col. Pankaj Maggo), "Disregard" (Lt. Col. Prakash), "Stop forwarding. Tell the sender to also avoid forwards. Delete the message" (Lt. Col. Amitabh Sharma/Army). However, Wg. Cdr. Joginder Singh Maini advises that "If you believe the content is right, then I like to forward or propagate in other groups as well".

Giving us more insight into how WhatsApp and fake news are viewed by the armed forces, Brig. Tripathi (name changed) says it is very evident that propaganda from across the borders are filtering through into India. For instance,

> Any controversial subject like the recent Article 370 abrogation, then the CAA bill…even in the past any such inciteful incidents are always hyped up by the people from the borders across…not only on the western but also from the northern borders.

These he says are "disguised" as "you wouldn't know the origin". He says, these messages appear to be from citizens but are not because "a normal citizen will not figure out such things. Lot of research have gone into it". When asked if he believed these were made to order, he emphatically agrees. Brig. Tripathi (name changed) goes on to say that troops are advised "on a regular basis" to be watchful about propaganda received through WhatsApp and

other social media. Getting "honey trapped" through this kind of app is also a real danger "since boys are away from the families" and this is "reiterated, repeated at all levels". Also, to always "follow the security instructions which are there with regards to communicating on landline or mobile in which you got to recheck the identity and authenticity of the person who is calling up". These are, of course, instructions that were framed well before WhatsApp and are designed to protect information from going out inadvertently with callers pretending to be serving officers or using other stratagems to glean information on troop movements etc. When asked if there is some kind of training being given to personnel to help them guard against fake videos etc., Brig. Tripathi (name changed) says:

> This is something which is a live issue … we tell them (armed forces personnel) to be more discerning with the content which is coming and if there is a doubt, or clarification is sought, they can always walk up to their immediate superior … and clarify.

Besides this, he says:

There are special organisations which are looking after, (such things-) signal intelligence, your military intelligence, they are dealing with such things (deep fake videos etc). For the normal soldier or for an officer, you are made aware of these issues and you are told to not be susceptible or fall prey to it. But as far as discerning, identifying, all those things are done by a group of specialists and part of signal intelligence and military intelligence.

## III. Delhi

All the respondents, including 14 working professionals over the age of 40, one homemaker over the age of 60 and one working professional under 25, agreed that fake news is a menace, though Ria, 23, believes it is not for her as she does not receive any forwarded messages or if she does, she does not look at them. Also, they were nearly unanimous that they are not affected by forwarded messages that are politically or otherwise motivated. In fact, Rajeev, 52, says, "Most of them are so obvious that they reveal the source bias, hence can't be taken seriously". Rina, 48, however says they do affect her perception. Vipul, 42, also admits that "they do have a little impact (though) I do check the veracity before believing. On the whole, some lower strata do get impacted". The measures that are suggested to counter fake news by respondents range from positive advice – banning it (Jahnavi [name changed]), ignoring it (Shyamala), "don't spread it" (Rohini), verifying before sharing (Rina) – to downright despair "nothing can be done" (Lakshmi [name changed]). Rajeev, however, has detailed suggestions:

*First*, Facebook (the owner of WhatsApp) has algorithms to track everything. They should also be able to detect doctored videos (the biggest source of mischief) and delete them promptly.

*Second*, end-to-end encryption only seems to spur nefarious usage, and courts should be able to summon info about source of fake news forwards etc.

*Third*, they should have a subsidiary that is legally incorporated in India, with servers too located here.

## IV. **Mumbai**

Respondents from the city comprised eight news professionals and two other professionals/entrepreneurs, as well as two working in the government sector and one teacher (the lone student has been included in the broad category of students above). Medha says she does get influenced by forwarded messages "so (I) look up Google and confirm. Stopped forwarding such messages". Asha says she receives "Many, many politically motivated forwarded messages. Most of them anger me, since they are blatant fakes and intended to cause rifts and dissension". Her solution?

> I don't know if WhatsApp has the power to counteract the effects of fake news – I would suggest a combination of topic-specific education and advocacy on the part of WhatsApp; together with law-and-order improvement and having our leaders lead by example.

Other solutions range from the use of AI for screening and "blocking for life on Facebook" (Neelu) to verification before forwarding (Mamta/Tulsi [name changed]). Sushil (name changed) in fact says that it's not just fake news that is a menace but "also many fake inputs/personal biases and opinions on health and wellness, religion, social issues". Nikhil believes that when such messages come, "the value and credibility falls down if it's from WhatsApp". In a WhatsApp chat with the authors, Chandra Subramanyam, a writer in her 60s, said she likes to forward messages received from one group to all her groups, almost like a duty or chore to be completed.

## V. **Vadodara**

Animesh says politically motivated forwarded messages do not affect him as he deletes most without reading and also he "does not vote". Niyati says the only way to counter fake news is "by letting people know that it is fake news and also by not forwarding such material indiscriminately". She says she has received forwarded messages, but these have not "really influenced me". However, Abhinav says such messages have been successful in changing his

mind. His suggestion is that "Government should provide a cyber cell number where we can forward the news message to confirm if it's true". Meanwhile, Pooja avers that fake news "is one thing I don't like about WhatsApp".

### VI. **Prayagraj/ Lucknow/ Pratapgarh**

Raj Kishore says he does receive politically motivated forwarded messages "which are annoying", but they are not able to change his mind. "I stop liking such persons who forward them. Sometimes these messages are so irritating that I block my 'friend's' number". He believes fake news "should be banned. The person forwarding or sending fake news be held responsible and should be punished in suitable cases". Dharmendra Singh also from Allahabad says forwarded messages do change his mind, "but not at that level. But the hidden things/facts change some of my points of view". He says, "an easy way to counter it is to read and understand the message before forwarding".

Priya from Lucknow believes she is not affected by forwarded messages on WhatsApp and says, "content should be monitored throughout social media, especially bulk messages". Most others from Lucknow and Pratapgarh said they believe forwarded messages do not influence them, and that they had "no idea" on how to control the menace of fake news.

### VII. **Varanasi**

Vinay Kumar, Assistant Professor at Banaras Hindu University (BHU), says fake news "Samaaj ke liye khatra paida kar raha hai" (translation: "is becoming a danger to society") but had no suggestion to counter it. Professor Dinesh Ojha from the same university has a different view though. He says, "Spread of fake news is not a problem as big as it is propounded to be. Any outside influence would be tantamount to selective interference most likely to favour the authorities and privileged elite". Professor Ashish Tripathi, however, believes that those who spread fake news must be named under the provisions of the IPC (Indian Penal Code). Professor Pankaj (name changed) says one should verify before believing any such forwarded messages or else there should be a way to verify the authenticity of a message.

Meera Vohra, a journalist in Varanasi, says she is not influenced by forwarded messages on WhatsApp. When it comes to fake news, she suggests, "some regulations that if someone is deliberately spreading such news, action should be taken against him".

### VIII. **Agartala**

Three of the four respondents from this remote city from India's north-east were media professionals, while one works for the government. Samrat, a

journalist, says politically motivated forwarded messages "work to make changes in my political thinking" but has no suggestions to counter it. Arpita considers fake news a menace "since it spreads rapidly". Swapnil believes "media literacy" can help counter fake news while Sutapa says, "People always should recheck the fact".

## IX. Bengaluru

Respondents from this megacity in southern India include four government officials and one senior professional from the private sector.

Latha (name changed) from Bengaluru says politically motivated forwarded messages have been successful in changing her mind as "Every form of communication has its own effect. But intensity depends on who receives it". She suggests that one should not forward messages "unless you get them confirmed. Do not share the news if it is not in the interest of society". Shreekanth believes that "monitoring is required from government side" to counter fake news, while Thukarama Gowda also calls for "some regulation" though he thinks it is "difficult to control".

The lone private sector professional, Rajnika, admits that sometimes forwarded messages help change her mind. Her suggestion is to have "a way to report any information fake".

## X. Patna

In Patna too, the four respondents were professionals from the field of media, working for the Government of India. N.K. Jha, Birranjan Saha and V.K. Keshri claim that forwarded messages do not change their opinion on issues and advise that fake news should be blocked. However, Prashant Kumar says such messages have helped change his mind on issues. But he also believes that the only way to counter fake news is to block it.

## XI. Kolkata/ Indore/Port Blair/Hyderabad/Gwalior

Jane Namchu, a senior government officer based in Kolkata, says she does not receive many forwarded messages and hence does not think the problem of fake news is a menace for her personally. Kakoli, a teacher from Indore, says she "does not pay any heed to" forwarded messages and suggests one should not forward such messages to curb the menace of fake news. Another teacher, Ramachandra (name changed) from Ranchi, admits politically motivated forwarded messages are able to change his mind "to some extent" and urges people to "verify source" before forwarding such messages. Nilesh based in Port Blair says he "does not entertain such forwards". His suggestion is that "A jan andolan (people's revolution)/PR (Public Relations)

exercise should be undertaken to educate people about judging forwarded messages on merits/facts rather than on masala (spice) in it". Dimple, an academician from Hyderabad, calls for "serious attention" to be paid to the menace of fake news and is firm that such messages are unable to change her mind. Abhijit Dutta, a professional based in Gwalior, says his mind is not changed by forwarded messages; his advice is that people should "ignore such news".

## XII. **Foreigners in India**

Of the 21 surveyed, most were not users of WhatsApp in their countries of origin that included Afghanistan, Bangladesh, Bhutan, Cuba, Egypt, Ethiopia, Guinea, Malawi, Nigeria, Russia, South Sudan, Syria, Tajikistan, Tanzania, Uganda and Zambia. In one voice, they are of the view that one must ignore forwarded messages which are barely disguised propaganda. Anna (name changed) has an innovative approach though. She says "A good response (to propaganda received) would be to write a message which discourages the spread of propaganda messages and broadcasting it and further encouraging recipients to broadcast to their contacts too".

### Quotes from the Survey

> Given that it (propaganda) is coming from people who've either drafted it (the forwarded message) themselves or mindlessly forwarded it, there is nothing much to do. They do not understand your point of view. So, speak your mind and leave it at that. A conversation will only lead to them trying to convince you otherwise. If it goes beyond tolerance, please block them. Retain your sanity.
>
> *Kamala, 22, student, Delhi*

> Sometimes there is misinformation even on official (groups) … so some draft has been typed, somebody has taken a photograph and sent it to you, saying 'Sir this is the latest thing on that' and then you realise that's not true…people tend to be in a hurry to (share).
>
> *Badri Narayan, 56, Senior government officer, Delhi*

> Every time my friends send me some videos or messages related to army or any jawans, I always think that the news which is sent by my friends related to them is true because mostly people think that their friends are not so stupid as to forward something without checking it and if they send me something fake, it changes my mind that the news which is being sent by them is true without any verification.
>
> *Maneesha Sarmal, 22, student, Kathua*

> Every new form of technology (telegraph, radio, TV, internet) that decreases the effort/time/money to communicate to others, magnifies the talents we have as well as the flaws we have. Our urge to create, spread misinformation, knowingly or unknowingly is accelerated by WhatsApp. Fake news is an issue of human nature, it is a menace everywhere (Fox news, Twitter, newspapers) and any countering policy will have to be non-intrusive, or else people will shift to some other app.
>
> *Animesh, 32, businessman, Vadodara*

> We have to be careful of those trying to misuse its reach and impact to spread by strong and hateful information and news. An effective way to do that is by cross checking the information received from where is credible sources before becoming part of the share this information bandwagon.
>
> *Saquib, 22, student, J&K*

> I do believe (forwarded messages) only which are related to my known person and forwarded by my near ones.
>
> *Norboo, M 26, Student, Leh*

> Whenever there is a good message I tend to forward to my friends and to other groups … if you believe the content is right then I like to forward or propagate in other groups as well.
>
> *Wg Cdr Johinder Maini, M 35*

## Conclusion

From the lynchings in 2018 to the fightback against Covid-19 in 2021, WhatsApp has been blamed for enabling the circulation of fake news leading to tragedies. Instances of rioting, resulting in the loss of lives, have also been purportedly incited by WhatsApp, including those during the Delhi riots. So much so that governments have had to come out to warn their citizens against sharing "inflammatory messages" on WhatsApp and the Indian Supreme Court has had to voice its concern in March 2020 that the country would lose more citizens due to panic created by fake news rather than due to the coronavirus. The pandemic saw its own spread of misinformation via WhatsApp and took the form of justifying unscientific advice and pushing misinformed remedies into Indian society.

Many studies have sought to explain this phenomenon of fake news which does seem to impact its consumers. One study points out that fake news messages relating to one's sociopolitical identity get the most traction, while another says the need to be part of a group and get social acceptance is what drives fake news the most, yet another that it is the trust factor which is responsible. Some academicians believe emotions play a vital role in making

people susceptible to misinformation, some say videos are more believable than other formats. Another study lists the predictors of susceptibility as being active on social media and politically conservative. It also says older people who might not be as susceptible to fake news are likely to circulate it more than other age groups for motivations other than accuracy.

Scholars are, however, united in calling for promotion of digital media literacy as a way to counter fake news. While one report urges journalists to investigate the organised ecosystems behind it, another gives an entire gamut of recommendations for all the stakeholders. But a London School of Economics study suggests that *critical* rather than functional media literacy could be the key to curb misinformation, along with some other measures.

As for dealing with electoral misinformation, one suggestion is for WhatsApp to de-crypt all groups where less than one-fifth the members have the admin's number saved. Nikhil Pahwa, founder Medianama, advocates the use of "counter speech" to fight against fake news, along with digital media literacy. By that is meant the use of credible people to counter fake news coming from people in authority.

The advent of AI in creating misleading content with malicious intent or otherwise is likely to prove even more problematic, as per scholars. The AI tools are open access and easily available and can spawn a new generation of fake news barely distinguishable from reality. Scholars like Yuval Noah Harari paint a scary picture on AI usage, saying it could impact culture and ultimately democracy (Jose, 2023). Since AI-generated fake news is even more insidious, one suggestion has been to create a tool or even use a real person as a Cognitive Security Specialist who can keep analysing the information environment around us and guiding us on when to limit our intake of information, as well as pointing out inauthentic information.

In April 2023, the Government of India announced the setting up of a Fact Checking Unit with powers to determine what is "fake, false or misleading" relating to "any business of the Central Government". The Unit is empowered to instruct intermediaries not to host such content. However, the notification for the Unit was postponed to July 5, 2023 (Sahyaja, 2023).

From the authors' survey, it emerges that most students do not believe that forwarded messages make them change their minds on any issue, but sometimes they said it helped them know what the issue was or what was trending. A significant number said they do not trust content floating on WhatsApp. This mistrust was found to be higher in students from the border union territories area of Jammu, Kashmir and Ladakh, but this extended to all social media platforms. Some believed that their parents were more likely to be swayed by messages on WhatsApp than them. Students overall were aware that they could be receiving propaganda on the app, especially

during elections. At least three people have hinted at older people tending to forward propaganda uncritically on WhatsApp.

Officers of the armed forces were very much aware that they could be receiving propaganda via WhatsApp. Most said their opinions could be swayed sometimes through messages received on WhatsApp, especially if received from credible sources. Though officers were advised to be watchful about propaganda, there was no special training given for spotting fake news on social media.

Government officers, professionals, businessmen and housewives were equally emphatic that fake news is a menace. Most felt it did not alter their perception, but some admitted fake news changes their mind. A number of them said they did not entertain such forwarded messages and ignored them. Foreigners in India too believed such messages must be ignored. Across categories, trust in the sender or credible source seemed one factor which aided the spread of fake news.

As highlighted in the chapter on politics, the survey overall revealed that motivated messaging or propaganda on WhatsApp can alter opinions among recipients of those messages. In terms of percentage of those affected, the survey illustrates that the armed forces are some of the most vulnerable to such messaging, with over two-thirds (67%) of those surveyed saying they believed their opinions had been altered by propaganda on the app. It may be mentioned that the sample size of defence personnel was 12, comprising 11 men and one woman. The other highly susceptible group was of students in Jammu and Kashmir and Ladakh, over half of whom (52%) said they felt motivated messages received on WhatsApp had helped change their minds on issues. In this case the number of respondents was 23, all in their early twenties, 14 of whom were women. However, only 26% of students in other parts of the country state that WhatsApp messages changed their minds on any issue. Similarly, 30% of professionals/entrepreneurs surveyed believed messages received via WhatsApp had impacted their opinion on issues, while 22% government officials were of the same view. Of the teachers surveyed, 27% said that motivated messages on WhatsApp had affected their opinions on issues.

Among the suggestions received to counter the menace of fake news were to ignore such messages that appeared to be fake news, not forward them further, delete them, block the sender and make others aware of the false claims. Some solutions on the technological front were to have a "verified" tag where people could vote for credibility, have a watermark for suspect messages, an ID for every message to help identify source, limit the number of messages people could send, have third-party fact-checkers or that WhatsApp should become a paid app.

One suggestion was to promote other platforms such as Google classrooms so that students are not confined to WhatsApp. Among the social

solutions suggested was to encourage media literacy and have "sensible" admins and encourage people to fully read any message before forwarding, exiting groups where such content is prevalent, having society leaders led by example in not forwarding fake news. Among regulatory solutions was to have a facility to report message content, have a Do Not Disturb registry, categorisation of content being shared on the platform, have stricter punishments for circulating fake news, blocking for life from Facebook, have a helpline where authenticity of messages could be checked or get WhatsApp to have a subsidiary legally incorporated in India with servers in the country. One out-of-the-box suggestion was to utilise WhatsApp itself to spread messages against fake news.

Overall, the authors' survey ties up with the insights of Chapter 2 on psycho-social aspects of using social media, especially messaging platforms like WhatsApp where users are able to be invisible, allowing them to lower inhibitions in their interactions. Asynchronous conversations also mean that a person who forwards a message can escape the immediate consequences of the communication. Combine these with dissociative imagination (seeing cyberspace as make-believe) and dissociative anonymity (compartmentalising online activity so that it is not integrated with their offline identity), solipsistic introjection (assigning imaginary characteristics to people one is interacting with online) and a collapse of hierarchies, and one has the makings of toxic disinhibition leading to circulation of fake news.

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# 6

# REGULATORY CHALLENGES

## Crime and Punishment

### Introduction

> *In a high-profile case, Aryan Khan, the son of Bollywood superstar Shah Rukh Khan, was taken into custody by the Narcotics Control Bureau (NCB) in the first week of October 2021. Aryan Khan was arrested along with two others accused of alleged drug abuse aboard a cruise ship off the west coast of India. The main "evidence" of drug trafficking related to WhatsApp chats of the accused. "The NCB claimed before the city court that 'shocking and incriminating' material has been recovered in the WhatsApp chats of Aryan Khan, Merchant and Dhamecha showed international drug trafficking". Aryan Khan was later released for lack of evidence and the role of the arresting officer from NCB was under examination.* (Ray, 2021)

Seamless connections are what characterise WhatsApp. The ease of use, intimacy of the medium and myriad features have made this application spread across the world with the speed of the proverbial wildfire. Novel regulatory problems have come in its wake. Issues such as freedom of speech, privacy, surveillance, hate speech, identity theft, mobile payments, harassment, child pornography and others have come to the fore. Countries such as China have not allowed WhatsApp to be used behind the Great Firewall of China. Instead, they have the ubiquitous WeChat, a Chinese domestic equivalent. China is ahead of the curve vis-à-vis India in the sense that they now have a unique identification score or Social Number, for their citizens, a composite number based on their social media interactions amongst other things (Ma, 2018).

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While WhatsApp was acquired by Facebook in 2014, fears remain that WhatsApp is sharing data with its parent company Meta. This is particularly true of the new payment options enabled over WhatsApp. Unauthorised data sharing and invasion of privacy have become big issues in the new media world in India in the wake of the Cambridge Analytica Data scandal. The Right to Privacy was declared a fundamental right in 2017 due to interventions from the judiciary extending Article 21 of the Indian Constitution. This followed in the wake of privacy concerns following the roll-out of Aadhar, India's national biometric-based identity number scheme. The concerns were regarding unauthorised sharing of personal data or surveillance. Legal provisions for protection of data in India is purportedly to be based on the European Data Protection Law called General Data Protection Regulation which came into effect in 2018 (Parthasarthi & Aggarwal, 2019).

However, Mark Zuckerberg maintains that Facebook has not accessed data from WhatsApp because of its end-to-end encryption ("Mark Zuckerberg Defends", 2021). The encryption became effective only from April 2016 in India (Regidi, 2016). The data-sharing concerns relate to phone numbers acquired through WhatsApp and the unencrypted data available before. However, fears persist in the minds of users that their WhatsApp conversations are quietly being recorded on a server, or the cloud where they may be backed up where they will be sold to someone someday or made public.

Perhaps fears of invasion of privacy and surveillance are not unfounded. The company WhatsApp has categorically denied storing any user data on its servers. According to them, the data is stored in users' phones. In case a message is not delivered because of network issues, it is stored for a maximum of 30 days before it is deleted. However, the Pegasus scandal that unfolded in India in 2020 indicated that WhatsApp accounts of certain prominent persons, including politicians and journalists, had been allegedly hacked via Israeli spyware ("Explained: Pegasus, the", 2021).

As part of its routine global operations, WhatsApp regularly monitors content and shares information with prosecutors. This is in addition to the unencrypted data on users called meta data which are gathered and monitored by WhatsApp (Elkind et al., 2021). Content which is flagged as being problematic is viewed by "content moderators" who view it in the light of categories such as terrorism, child pornography etc. The company has over 1,000 contract workers at its offices in Dublin, Austin and Singapore who sift through private messages, text, audio and video flagged by users for possibly abusive content ranging from fraud and spam to child pornography and potential terrorist threats. These workers viewing WhatsApp content are hired via the technology company Accenture. The Meta company is reluctant to share details of content moderation at WhatsApp since it flies in the face of their claims of user privacy (Elkind et al., 2021).

Notwithstanding WhatsApp's assertions of a secure platform, the notice that it sent to users in January 2021 suggesting dilution of privacy and sharing of data with its parent company Meta sent shivers of apprehensions down the collective spine of users. In response, many users of WhatsApp opened accounts on rival platforms Signal and Telegram in January 2021. In fact, Signal saw a surge in new entrants and became the number 1 social messaging platform in India in January 2021, overtaking WhatsApp in the number of app downloads. According to the *Mint* newspaper, in the week 6–10 in January 2021, the Signal app was downloaded by 2.3 million new users while the Telegram app had 1.5 million downloads and WhatsApp downloads fell from 2 million to 1.3 million in the same duration. Of course, if one looks at lifetime downloads in India since 2014, WhatsApp has a huge 1.4 billion downloads, as compared to Signal with 3.9 million and 151.5 million for Telegram (Banerjee, 2021). Apparently, the announcement of changing terms of service by WhatsApp has also had repercussions in other countries. The UK's top data protection regulator said that millions of people have stopped using WhatsApp in favour of alternatives such as Telegram and Signal (Aarons & Bodoni, 2021).

WhatsApp came into the limelight in a negative way in the scandal that followed the mysterious death of Bollywood actor Sushant Singh Rajput in June 2020. WhatsApp conversations allegedly between Rajput's girlfriend Rhea Chakraborty and Rajput, as well with other Bollywood actors and directors, and drug peddlers were leaked to the media by the law enforcement agencies investigating Rajput's death. In an unrelated incident, the Delhi police filed a charge sheet in a special court against 15 people alleging that they made WhatsApp groups in December 2019 with the purpose of organising riots that rocked Delhi in February 2020. Alleged chat transcripts of these WhatsApp groups were again selectively leaked by the media (Deka, 2020).

In January 2021, another controversy surfaced pertaining to WhatsApp in India. The executive editor and lead television anchor of the *Republic* television news channel Arnab Goswami was embroiled in an unsavoury case regarding fraud in the television rating points agency, Broadcast Audience Research Council (BARC), wherein he was questioned by the Maharashtra police. As part of the materials collected by the police were transcripts of Arnab Goswami's alleged WhatsApp chats with Partho Dasgupta, the BARC head regarding some political controversies. These chats were downloaded from the chat backup feature on the cloud. This alleged leak led to a fresh round of questions regarding privacy and security of WhatsApp ("TRP Scam: Prashant", 2021).

Many other cases in India in the last four years have used evidence based on social media such as Facebook or WhatsApp. Cases of adultery with documentary evidence from WhatsApp have been produced in many divorce

cases. Incitement to violence, rioting etc. has also been made via WhatsApp posts, leading to crimes, social disharmony and even deaths. Arrests have in some cases been made on the basis of objectionable WhatsApp content. However, WhatsApp-related evidence also has its share of problems as far as investigative agencies are concerned. Apar Gupta, a cyber law expert, said: But generally Indian police and investigatory departments have claimed that WhatsApp has been uncooperative and has been saying that end-to-end encryption protects and envelops the message completely. However, the decryption keys … are, to my knowledge, available with WhatsApp. (A. Gupta, personal communication. 3.1.2018)

Regulation of new media in general has been problematic, with many new issues surfacing. The idea of regulating digital media has recently been put forward by the Ministry of Information and Broadcasting. The Central Government issued guidelines bringing in content providers such as Netflix and online news portals, including news on social media, under the ambit of the Ministry of Information & Broadcasting in February 2021 (Aryan & Mukul, 2021). Sometimes the impetus for regulation of new media is concern over the problem of "fake news" and hate speech. Digital media which is so easy to copy has intensified the problems associated with protection of copyright and piracy. When it comes to objectionable content, the very nature of digital media means that photos, videos, texts and messages can be circulated very easily, sometimes causing irreparable damage to a person's reputation.

The flood of misinformation and "fake news" circulating in various countries is pushed over social media with social messaging like WhatsApp playing a large part. The Pegasus scandal which erupted in India in 2019–2020 had political overtones as it appeared that the WhatsApp accounts of various opposition politicians, journalists and activists had been allegedly targeted and their smartphones subjected to surveillance via Israeli spyware called Pegasus ("Explained: Pegasus, the" 2021). All these controversies highlighted the importance of and difficulties associated with regulating social messaging apps which are encrypted.

Meanwhile, the central issue of how to regulate end-to-end encrypted content has not been resolved. How much responsibility does the platform or WhatsApp service provider have in terms of regulating content? Is the onus on the end consumer alone? What are the implications for populous democracies? Should we espouse the idea of leviathan state which will control all digital communications? In January 2021, the Delhi High Court in a judgement suggested that if users did not like the new privacy conditions of WhatsApp, they were free to exit the platform and to stop using the service.

Some case studies and a preliminary look at problematic issues would help a better understanding of the broader concerns related to the regulation of WhatsApp in the Indian context. The methodology of this chapter

is a compilation of secondary data regarding cases and crimes related to WhatsApp in India. Primary data consists of interviews with legal, technology and policy analysts whose expert opinions throw light on different aspects of WhatsApp regulation. The authors' critical commentary on the regulatory framework and current legal issues completes the chapter. The range of WhatsApp-related crimes are discussed in the following sections where a basic categorisation of criminal activities has been undertaken.

## Examinations and Cheating

A case of cheating in examinations was registered against several students in Mumbai in 2017. It was learned that they had shared the High School, HSC Accountancy examination paper via WhatsApp prior to the examination. The scope of the problem is evident in that the police suspect that at least 700 students received this exam paper via about 7 WhatsApp groups which had about 100 members each. The police had sent one of the seized phones to the forensic laboratory to trace the source of the exam leak. Extra vigilance is now required on the part of examination conducting authorities ("HSC Question Paper", 2017).

A similar case concerning widespread cheating was reported in the Central Board of Secondary Examinations (CBSE) annual examination for Classes 10 and 12 in March 2018. According to a news report, two teachers at Mother Khazani Convent School in Bawana got access to the question paper of Class 12 Economics one hour before the exam was scheduled. They sent pictures of it via WhatsApp to the head of a coaching centre. He in turn shared them with his students. Their illegally copied Economics and Mathematics examination questions were circulated via WhatsApp, reaching students in many schools, mainly in Haryana. Finally, they were mailed to the CBSE by a student requesting action to be taken, and a re-examination had to be ordered (Bhandari, 2018). The police had to interview various members of the concerned WhatsApp groups until they found the source of the examination leak. The culprits were nabbed by following the trail on the WhatsApp groups. "This question can come, this is the wrong question, who has sent these questions, Have they come from CBSE?" These are a sample of chat messages retrieved from four WhatsApp groups named in the First Information Report (FIR) pertaining to the CBSE Class 12 Economics paper leak, which was registered on March 27 (Singh, 2018). There are over 100 members in the four groups mentioned in the FIR. Many of the members are teachers with well-known schools. Photos of handwritten questions were first shared on one of the groups by one member. It was the WhatsApp chain through which the Special Investigation Team managed to get a vital break in solving the exam leak case. In this case, it was relatively easy to identify the source, which is the main problem with forwards on WhatsApp.

Also, they were able to identify the handwriting as belonging to a particular student, which may not be the case in other incidents relating to cheating or leaks.

### Hate Crime and Crowd Mobilisation

In May 2017, virulent messages circulated on WhatsApp among villagers of the state of Jharkhand warning them about a group of men travelling in the region with the purpose of kidnapping children. This region is characterised by relatively low levels of development and literacy. The impoverished people, many of them tribals, are engaged in subsistence agriculture and manual labour. Education and health indicators are lower than the national average. On May 17, 2017, Sheikh Haleem, a young businessman from Haldipokhar village in East Singhbhum, travelled with three business associates to meet his brother-in-law in a village about 10 km away. Fearing kidnappers, the villagers had set up a rough check post on the road and circulated messages on WhatsApp that Haleem's car was that of the kidnappers. Haleem's car sped through the check post. Several hundred villagers surrounded Haleem's brother-in-law's house. The mob burnt his car. Haleem and his associates were all set upon by the mob and were lynched (Mahaprashasta, 2017).

In another gory incident, three men Vikas and Gautam Verma, and their friend Gangesh Gupta were also murdered by a mob agitated by rumours of child kidnapping. They had been attempting to buy land to set up a business (Allana, 2017). Allana believes that free usage of WhatsApp and anonymity make this platform the perfect one for spreading bizarre stories and politically motivated rumours. Add the ingredients of poverty, and low literacy and it is a combustible mix. Other hate crimes also have a link to WhatsApp. On June 4, 2014, Mohsin Sheikh, a young information technology professional, was beaten to death in the city of Pune. Allegedly derogatory pictures of Chhatrapati Shivaji and Bal Thackeray were circulated by him on Facebook and WhatsApp. He was lynched by a mob on the street, which clearly identified him as being Muslim by his beard, and skull cap (Firstpost, 2014).

A hate crime was linked to false rumours circulating on WhatsApp. On September 28, 2015, rumours were spread on WhatsApp and other social media including pictures of body parts of animals that Mohammad Akhlaq, an ironsmith in Bishara village in Uttar Pradesh, had allegedly killed and eaten a cow. This was considered a blasphemous act by the Hindus in his neighbourhood. In a horrific response to the false WhatsApp rumours, he was lynched in front of his house by a mob of his neighbours (Javaid, 2015).

In another incident relating to the medieval Maratha king Shivaji and WhatsApp, Sunil Waghmare, a professor of KMC College in Khalapur,

Maharashtra, was arrested in March 2017 for a post in a WhatsApp group comprising his colleagues. The professor had apparently questioned the second celebration of Shivaji's birth anniversary. He was threatened and attacked by students and professors at the college the next day, and was later arrested on the grounds of inciting violence. The case registered against Waghmare is under Section 295 A of the Indian Penal Code, which is deliberate and malicious acts intended to outrage religious beliefs ("Mumbai: Professor Held", 2017).

An interesting aspect of crowd mobilisation via WhatsApp which has trans-border ramifications is the case of Kashmir. Jammu and Kashmir has been a troubled state (now a Union Territory) with problems of militancy and insurgency especially in districts bordering Pakistan. In 2017, there were numerous occasions of disaffected youth gathering in mobs and pelting stones at the defence forces in Kashmir. Police officials suspected Pakistani involvement in mobilisation of crowds to disrupt anti-militancy operations by the armed forces in Kashmir. Crowd mobilisation was happening via WhatsApp groups in Kashmir. Police found at least 30 problematic WhatsApp groups with members in Kashmir which were circulating false information about incidents in Kashmir in March 2017. The rumours were designed to draw in crowds, generally disaffected youths to encounter sites. In this context, the police detained 65 persons, 11 group admins and 54 members which were allegedly circulating such rumours. Some of these groups had Pakistani numbers as administrators. The police launched a crackdown on such rumour-mongering and fake news circulating via WhatsApp in Pulwama District in Kashmir (Hassan, 2017).

Organisations like the Atlantic Council's Digital Forensic Research Lab (DFR Lab) have been recently reporting the worrying trend of the increasing use of social media such as WhatsApp, Facebook, Telegram and Twitter by "proxy militant groups" for anti-national purposes in the geopolitically sensitive area of Jammu and Kashmir (Kaul, 2020). A study by DFR Lab between July and August 2021 of "two encrypted WhatsApp chats and five Telegram chats operated by local insurgent groups" concludes that the Taliban agenda is being pushed to militant groups in India via WhatsApp and Telegram (Kaul, 2021).

The problems of tackling the issue of WhatsApp-linked hate crime are manifold. While it may be easy to correlate WhatsApp rumours and incidence of particular crimes, causality is much harder to establish. One major issue is that the Indian government data on public lynchings is not compiled. No composite official statistics on this social evil are released by the Indian Crime Records Bureau. Media coverage and media literacy efforts have been mainly available in English or Hindi language media and not so prevalent in the regional media, so it is hard to debunk rumours in remote and rural areas as many of them are not conversant in English or Hindi.

Yet another issue where social media like WhatsApp played a crucial role in the mobilisation of people was the protests that swept the nation in March 2018. The March 20 judgement of the Supreme Court on the Scheduled Caste (SC)/Scheduled Tribe (ST) Prevention of Atrocities Act, 1989 ("The Scheduled Caste", 1989), was widely perceived as a dilution of the Act, and unfavourable to the SC/ ST communities. A *Bharat Bandh* (shutdown) across India was declared in protest by the SC and Adivasi (tribal) groups. The protests were widespread across India, leading to violence, deaths, disruption of railway services and arson. Six people were reported killed in Madhya Pradesh, two people in Meerut and many others were injured across Madhya Pradesh, Uttar Pradesh, Orissa, Chandigarh and Uttarakhand. It has been reported that this is possibly the first such national mobilisation of Dalit and Adivasi groups in recent times that was spearheaded by different national and local organisations and not a political party (Nair, 2018). According to Ashok Bharti, chairman of the National Confederation of Dalit Organisations (NACDOR), a motorcycle rally was taken out in Delhi on March 25, 2018. Messages were circulated via WhatsApp and hundreds of meetings were organised across India by different organisations leading up to the nationwide protests.

It may be posited that majoritarian and "nationalist" rage is partly being fuelled by social media like Facebook, Twitter and WhatsApp. WhatsApp being encrypted has "empowered" certain antisocial elements that are tasting power without responsibility or accountability. However, the same social media can also be used effectively by citizens groups as was evident in the farmer's protest at the borders of Delhi in January 2021. The protesting farmers had their own dedicated YouTube channel *Kisan Ekta Manch* (translates to Farmers Unity Platform) and Twitter hashtag #TractortoTwitter. Content uploaded on the YouTube channel by protesting farmers had been shared across various WhatsApp groups, a lot of it giving their version of events relating to the new farm laws recently passed by Parliament (Ananth, 2021). A Facebook page with the same name was created and then removed by Facebook, but after a public outcry it was reinstated. Certain Twitter handles, including @tractortotwitter, were suspended by Twitter after the events following the intensification of farmer's protests on Republic Day, January 26, 2021, and thereafter (Ajmal, 2021). Tweets and YouTube links on the farmers protest were being shared via WhatsApp groups to multiply their reach manifold. However, even on WhatsApp groups, such items often created heated debate between group members with some endorsing the farmer's stand and others opposing it.

The battleground for virtual conflicts is often located in the WhatsApp groups of Resident Welfare Associations (RWAs) in urban areas in India. An interesting anecdote may illustrate this point. In the long months that the farmers were protesting at the borders of Delhi, many anti-farmer

news items and opinions were expressed via the WhatsApp group of the Resident Welfare Association of Sector 17, Noida, a residential colony in Uttar Pradesh, part of the National Capital Region. In late January 2021, one resident Shoma (name changed) circulated some pro-farmer news items and expressed her support for their cause. She was immediately targeted on the group by other members of the RWA and even accused of corrupting the minds of the young adults in the group with her opinions. Things got so heated that she had to quit the official WhatsApp group of the local RWA, inconveniencing her as legitimate information about the administration of the housing colony was no longer available to her, even as the global Covid-19 pandemic continued. The long Covid-19 presence in India had meant that many RWAs had assumed extra powers in attempting to stem the spread of the pandemic (Shoma [name changed], personal communication, 1.2.2021).

### Rape, Murder, Sexual Predators

Another category of horrific content circulating on WhatsApp is murder footage, child pornography, gang-rape videos and rape-related content. So not only is some content possibly inciting hatred against minorities, it is also instrumental in encouraging misogyny and violence against children in some instances. Some young girls and minors have been blackmailed into sharing compromising photographs of themselves via WhatsApp messages and video calls. The contact could be initiated via Facebook, Facebook Messenger or Instagram. Once the predator has the number of the victim, the contact shifts to WhatsApp.

This is a global problem, but the gravity of the problem is highlighted more in Western countries than in India. European countries have stronger data protection provisions and also have more media literacy programmes per capita to spread awareness as compared to India.

In March 2017, in Germany, a teenager allegedly slaughtered his 9-year-old neighbour and posted the video of the torture and murder on WhatsApp and in online chat rooms. The material was also shared on the "dark web". He was dubbed *the WhatsApp double killer* and the "thrill killer" and boasted about his crime. He finally gave himself up to the police. So it does not seem as if India is the only country that is struggling with crime and social media platforms such as Facebook, YouTube or applications such as WhatsApp (Syson, 2017).

Closer home, in a video circulated on WhatsApp, a young schoolgirl is seen crouching in a sugarcane field. Her eyes are filled with fear. Her hands are folded in silent supplication, an appeal for mercy. It is not forthcoming. She is surrounded by sexual predators. The rapists move in for the kill. No one hears her cries for help. This particular video footage was taken of a rape of a young girl somewhere in Uttar Pradesh. What is especially perverted

and nauseating is that the rapists record their crime. Smartphones are their weapon of choice. Sometimes it is posted online, used to blackmail the victim. Sometimes it ends up in the dark underbelly of purveyors of pornography who end up selling video clips like this for amounts as small as Rs.50 to Rs.150 per clip. These clips which vary in duration from 30 seconds to 5 minutes are up for sale in shops across Uttar Pradesh, seemingly making a mockery of the administration and law enforcement. Such sales are not made openly, and are only sold to customers armed with a "reference". According to a shopkeeper in a market in Agra, pornography was considered passé and real-life crime videos such as rape was the current trend. Dealers download the clips directly on to smartphones or pen drives. Apparently, this makes it very easy to share such content, and it often goes viral (Chauhan, 2016).

In another report, rape videos also called *WhatsApp sex videos* are found to be up for sale across the state of Uttar Pradesh, for amounts varying from Rs.20 to Rs.200. The faces of the women victims are visible, their cries are audible (Dutta, 2016). These videos are shared via WhatsApp on smartphones. Where does this leave law enforcement? Dutta's reportage is based on an investigative report undertaken by the international television channel *Al Jazeera* in the city of Meerut and its surrounding areas in the state of Uttar Pradesh. Apparently, the trading in these rape videos is shrouded in secrecy. In a chilling admission in the same report, a man from Saharanpur, who is a customer of such rape videos, says he views them as they give him "peace of mind". The wide circulation of such content on WhatsApp is apparently of no concern to the sellers of videos. The law enforcers seem to be on the back foot in the face of this rampant circulation of rape videos. While there was a crackdown by the police following public outrage in 2016, with much criminal and pornographic content being seized, the sellers were soon out on bail and it is possible they had gone back to peddling their disgusting wares (Ashraf, 2016).

Since the law enforcement agencies appear to be lagging behind in the face of criminal rape content being traded and circulated widely, some activists have resorted to other means. In an ironical twist, Hyderabad-based activist Sunitha Krishnan turned to social media instead. When informed about viral rape videos circulating on WhatsApp and social media, she hit back with her social media campaign #ShametheRapist in 2015. In this campaign, the rape videos were posted on YouTube and circulated with the victim's faces and identifying elements blurred while the perpetrators could be easily seen. This campaign did result in certain arrests being made. However, her methods are controversial as the rape victim may not have consented to the use of the videos by the activist. In her defence, Krishnan has argued that the victims' identifying characteristics are blurred. The pervasiveness of the problem is evident by the fact that Krishnan had received over 90 such videos since the time she started her campaign in 2015 ("Shame the Rapist", 2015).

Another disturbing fact related to rapes is that most victims were not willing to file a police complaint once videos had been made because of the entrenched ideas of being a receptacle of the family's honour and of now having been defiled and shamed. The hapless victims sometimes resort to suicide out of trauma as there is no redressal for the crimes. A victim of a gangrape did commit suicide in Chapar village, Muzzaffarnagar, after the video of her assault was circulated on WhatsApp (Dutta, 2016). However, the majority of the cases of such rapes and circulated videos go unreported. It seems a double whammy for the victims that horrific crimes such as rape are not actionable, and then they are further traumatised by the digital reproduction and circulation of such violent crimes. The rape content creators and purveyors of videos all seeming to act with impunity, the victim, twice a victim. The Central Bureau of Investigation appeared to think the onus on crime prevention lay with platforms such as Facebook and YouTube, by installing censors within to stop circulation of such rape videos (Dutta, 2016).

Sunitha Krishnan's anti-trafficking non-government organisation *Prajwala* filed a petition with the Supreme Court in 2015. The top court ordered the Central Bureau of Investigation (CBI) to investigate the crimes, and also the government's response to blocking the videos. The Supreme Court in October 2017 ordered WhatsApp to improve its redressal system to make it easier to lodge complaints against circulation of videos showing sexual violence. This order was with reference to a petition initiated on the basis of a letter received by it from NGO *Prajwala* against posting of rape videos on WhatsApp. The Supreme Court also asked the government to create an administrative mechanism to monitor content related to child pornography, rape or gangrape which was being circulated electronically. The proposed centralised agency would be set up under the Ministry of Home Affairs or the Central Bureau of Investigation. It would maintain data of videos and hashtags to identify hashtags of child pornography, rape and gangrape-related content. Measures such as provision of a hotline to report such content as well as flashing warning messages when certain keywords were typed were also discussed. The top court also asked the government to come up with specific parameters to identify rape videos. It also advised the Central Government to ask state police to register a First Information Report (FIR) and start prosecution on getting complaints about posting of violent sexual content online. The matter should also be referred to the CBI (Sinha, 2017). In early 2020, the Supreme Court instructed the Central Government to resume its meetings with intermediaries Google, Facebook and WhatsApp for the purpose of doing away with circulation of child pornography and rape videos and images. This was in response to the submissions of the NGO Prajwala's lawyer to the Supreme Court ("Circulation of Rape", 2020). Apart from heinous crime, WhatsApp has been misused for financial crime as well.

### Commercial Information

There are some examples regarding commercial and economic implications of WhatsApp and regulation of problematic content. In July 2017, a message was circulated on a private WhatsApp group saying that the Indian pharmaceutical company Dr. Reddy's Laboratories Ltd. would not show good numbers, three days before the company announced its quarterly results. The message was posted on the "market chatter" group by a number belonging to Nishant Vass, an analyst at ICICI Securities, a leading Indian brokerage. The concerned WhatsApp groups had 45 members, most of them traders. The message proved to be correct, Dr. Reddy's reported a loss of Rs.587 million on July 27, a result that took many analysts by surprise. The WhatsApp message had predicted a loss of more than Rs.500 million (Nam, 2017). Reuters had documented at least 12 cases of prescient messages about Indian companies circulated in private WhatsApp groups. They pertained to forthcoming quarterly results, including net profits, revenues and operating margins. Interestingly, 6 of the 12 companies are part of the benchmark NSE index, namely Dr. Reddy's, Cipla Ltd., Axis Bank, Tata Steel, Wipro and Bajaj Finance. It is within the realm of possibility that the pertinent messages shared could be lucky guesses or shrewd forecasts based on publicly available information. The origin of the messages, and whether the recipients of the messages had traded on the basis of the information received, could not be ascertained by Reuters. Many of these companies when contacted by Reuters said they were not aware of the messages pertaining to their upcoming results that had circulated on WhatsApp and that their companies had high standards of guarding sensitive company information (ibid.) (refer to section on Business Use of WhatsApp in Chapter 9).

The legal view is that if any such messages posted on WhatsApp were judged by regulators to be unpublished price-sensitive information, then the persons circulating them are doing an illegal activity. According to Sandeep Parekh, a lawyer with Finsec Law Advisors, the sharing of information that could be unpublished insider information is illegal, even if that information is not misused for trading. In 2015, India beefed up insider trading rules, expanding "unpublished price-sensitive information" to include "any information" that is not "generally available" that could impact the market. Regulation also broadened the scope of who constitutes an "insider" to include "anyone in possession of or having access to unpublished price-sensitive information" regardless of how they came "in possession of or had access to such information". There are fairly severe penalties for circulating "unpublished price-sensitive information". They can be up to Rs. 250 million fines and a jail term of up to ten years (ibid.).

With WhatsApp entering into the digital payments arena, there are further issues of payment transactions which could be used for money laundering and also bank-related fraud etc.

> With payments being integrated with WhatsApp, WhatsApp will need a higher amount of collection of data to check fraud, misuse and transfer; it may compromise its ability to envelope the message if the payment transfer itself is the message. If you look at the Bhim app for instance, the privacy of the Bhim app or any one of the smart phone applications which permit transfer of money, they will give you some amount of background of the amount of user information, transfer information, which is gathered by the application, is then retained and then can be disclosed.
>
> *(A. Gupta, personal communication, 3.1.2018).*

### Cybercrime/Identity Theft

In February 2017, a bank official residing and working in Noida, Uttar Pradesh, filed a complaint with the Police Cell that his WhatsApp account had been hacked and offensive messages had been posted from that account to his contacts. He also informed the Centre for Cyber Crime Investigation. The victim informed the police that the messages had been posted from a remote location using WhatsApp web, via a computer (Alam, 2017). Cyber criminals are now targeting smartphone apps such as WhatsApp and Paytm (digital payments app) according to some reports published in 2017. Apparently, the Cyber Crime Police Cell in Bandra–Kurla in Mumbai received many complaints about persons' WhatsApp accounts being hacked. Messages would then be sent to the persons' contact list, asking them to deposit money in their Paytm accounts. It would seem that cloud-based apps such as these pose a security risk as they are being targeted by cyber criminals (Ozarkar, 2017).

Cab drivers Raghupal Reddy and Siddam Sridhar were arrested by the Hyderabad police in February 2017. Their crime? They had posted obscene adult content on a WhatsApp group, the Telangana Car Drivers Owners Association, that consisted of about 111 Ola and Uber drivers. The complainant E. Srinivas said that most of the cab drivers were married and that it was not hard for their spouses or children to see the explicit adult content posted by the duo. The two cab drivers were booked under Section 34 (criminal act done by several persons for a common intention) of the Indian Penal Code and Section 67 (publishing or transmitting obscene material) of the Information Technology Act ("Two Cabbies Held", February 26, 2017).

### Marriage and Divorce

Two women Mehreen Noor and Syeda Fathima Hina approached the Hyderabad High Court over the issue of having been given triple talaq or divorce over WhatsApp by their husbands who were based in the United States. According to their plea, "our marriages were performed as per Muslim rites and any dissolution too should be in tune with the Marriage Act. The petitioners sought guidance from the Court regarding pronouncement of "illegal" triple talaq through WhatsApp. They argued that such talaq without the consent of the wives violated Articles 14 and 21 of the Indian Constitution and also the provisions of Muslim Personal Law and the provisions of the Muslim Marriage Act. They also sought directions to the Qazi not to issue certificates of divorce based on WhatsApp messages ("2 Women Move", 2017). In another case, a Nagpur family court has granted divorce to a couple, where the husband was in Nagpur and the wife was in the United States. The hearing was conducted via a WhatsApp video call and the wife's consent was recorded (Maitra, 2019).

WhatsApp evidence is often being cited in court as evidence in divorce cases. According to Apar Gupta (A. Gupta, personal communication. 3.1.2018), a prominent media and technology lawyer:

> WhatsApp is not creating problems but WhatsApp is documenting them very well. My colleague here handles divorce cases, so it's quite regular for him in such cases for the spouses to turn over the WhatsApp histories in court, that's fairly common now.

### Voice Over Internet Protocol (VOIP)

The Delhi High Court sought a clarification from the Centre on the issue of telephone services offered by the WhatsApp calling feature etc. A public interest litigation had been filed by V.D. Moorthy who approached the Court for directions on Voice Over Internet Protocol services being offered by entities such as WhatsApp and Facebook Messenger. His plea argued that these two platforms needed to be brought under the ambit of regulation by the concerned ministries along the lines of telephone service providers and Internet service providers. The grounds for doing so were that such unregulated Internet telephone services were a threat to national security and also a loss to the exchequer (Venkatesan, 2018).

Regarding VOIP services such as WhatsApp calls, Apar Gupta (A. Gupta, personal communication, 3.1.2018) opines:

> Yes … it's under the telecommunications, it is problematic. They have rules which are under the Indian Telegraph Act and the telegraph means everything basically.… But they also have rules under the Information

> Technology Act made in 2011, so they may use either/or and it depends on the system of administrative practice…. These orders are not even in the public domain so one does not know. The closest parallel to such orders which are sometimes accidentally leaked in the public domain are website blocking orders which used to be done earlier. Now they have an entire legal regime for it but prior to that which was displayed they had a very low quality and they were released because they were sent to multiple ISPs, more than 100–200. From somewhere the press used to get a copy of them and they used to show they were citing an incorrect legal provision for a bunch of websites which were just listed. They were not even giving reasons individually why they were seeking.

According to Sunil Bajpai, Principal Advisor, TRAI, WhatsApp is an over-the-top (OTT) service and is currently not regulated.

> While WhatsApp mimics telecom services and can substitute for them, it is not subject to the same regulatory framework. For instance, it doesn't support lawful interception, claiming that it is committed to providing end-to-end encryption. Nor does it pay any licence fees. If it were to be regulated, WhatsApp could be asked to implement a mechanism that maintains end-to-end encryption till a request for lawful interception is presented to it. Thereafter, it would be obligated, without the knowledge of either party in a messaging or voice conversation, to make a transcript or recording available to the designated law enforcement agency."
>
> *(S. Bajpai, personal communication, 8.12.2017).*

Chaitanya Ramachandran, a technology lawyer, believes the issue of attempts by telcos such as Airtel to charge higher prices for VOIP services such as WhatsApp call feature violated the provisions of net neutrality. However, in India, the usage of the internet is heavily skewed in favour of the mobile device rather than the computer. Hence the importance of mobile Internet services in the net neutrality debate (Lahiri and Ramachandran, 2015).

### Privacy and Surveillance

New media, especially social media, have intensified certain pre-existing debates and issues such as privacy and surveillance. The controversies relating to Aadhar (India's equivalent of a citizen identity number) helped to ignite this issue. Is the state a panopticon? Are digital forms of surveillance increasing the power of the state vis-à-vis the citizen? Is the company owning the platform indulging in an invasive gathering of user's data? These are questions that are being hotly debated in India and elsewhere.

The Israeli cyber weapon called Pegasus highlighted the case of illegal surveillance of individuals enabled via their WhatsApp accounts. This issue which pertained to alleged surveillance of certain prominent citizens, journalists, activists, politicians and others in India in 2020 via their WhatsApp accounts exploited a weakness in the VOIP calling feature of WhatsApp. Pegasus was enabled for certain WhatsApp accounts targeted when they used the VOIP feature to make WhatsApp phone calls. Pegasus when enabled could surreptitiously transfer the contents of the target phone and switch on recording mike and camera without the person's knowledge or consent (Dhillon & Safi, 2021).

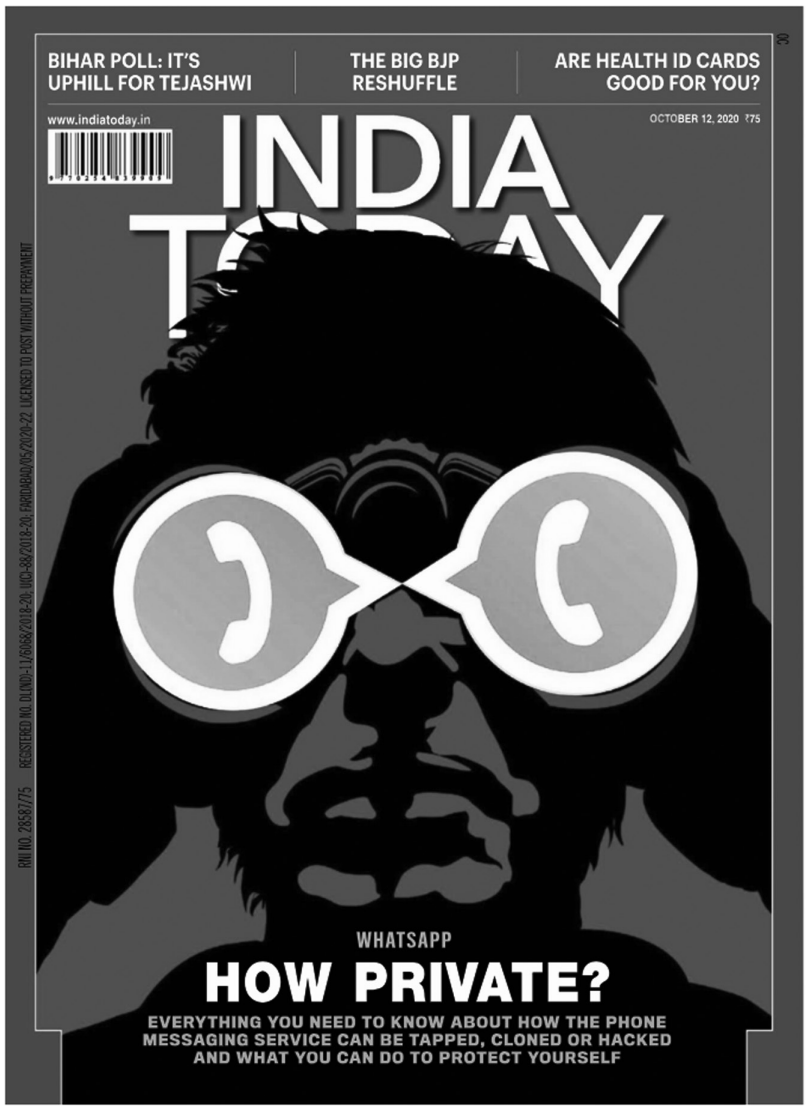
The changed privacy provisions announced by WhatsApp in late 2020 wherein some data would be shared with the parent company Meta led to an exodus of users to other messaging platforms such as Signal and Telegram. WhatsApp said that it reserved the right to share data, including location and phone number, with parent company Meta, Facebook as well as Instagram and Messenger. This changed privacy policy caused disquiet in Turkey, where the Competition Board launched an investigation into Facebook and its subsidiary units. A petition filed in an Indian court in January 2021 challenged Facebook on the grounds that its new privacy policy for WhatsApp verged on user surveillance. It further alleged that WhatsApp was infringing the users' fundamental right to privacy ("SC Issues Notice", 2021).

Users were uneasy because of WhatsApp's ability to share user metadata and mobile information with titan Facebook. Facebook intends to integrate WhatsApp, Instagram and Facebook with WhatsApp offering a tool that secures payments for services, along with ads posted on the other two social media platforms. This proposed integration would enable a monetisation (by the parent company) of their use by consumers. The proposed diluted privacy options enabling data transfer from WhatsApp to Facebook is not allowed in regions such as the European Union. In these regions there are restrictions on storage and transfer of user database on the European Data Protection Law called General Data Protection Regulation which came into effect in 2018. The Ministry of Electronics and IT in India has asked WhatsApp to explain why Indian users would be sharing their data with Facebook unlike European users ("Privacy and Surveillance", 2021, January 21).

Data protection issues have come to the fore with increased usage of digital data, including social media. The draft Bill regarding data protection proposed by the government in 2019 indicated that only sensitive personal data needed to be mirrored in the country, not all personal data as recommended by the Srikrishna Committee. Better data privacy is not only dependent on data localisation, but also on the possibility of domestic surveillance of citizens. Stronger contractual conditions on data sharing and more robust security tools being used to secure user data may lead to better outcomes as far as user privacy is concerned ("Privacy and Surveillance", 2021, January 21).

### Defamation

One of the grounds mentioned under Article 19(2) of the Indian Constitution under which freedom of speech and expression may be reasonably restricted


BIHAR POLL: IT'S UPHILL FOR TEJASHWI
THE BIG BJP RESHUFFLE
ARE HEALTH ID CARDS GOOD FOR YOU?
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INDIA
WHATSAPP
HOW PRIVATE?
EVERYTHING YOU NEED TO KNOW ABOUT HOW THE PHONE MESSAGING SERVICE CAN BE TAPPED, CLONED OR HACKED AND WHAT YOU CAN DO TO PROTECT YOURSELF

**FIGURE 6.1** Cover Story on WhatsApp and Privacy in Leading Magazine *India Today*, October 12, 2020.

*Source:* Authors' screenshot

is defamation. Is the WhatsApp administrator responsible for the content posted by various group members in the group? Hearing a defamation suit filed against a WhatsApp group administrator, the Delhi High Court said that the administrators of WhatsApp and other social messaging services cannot be held guilty of defamation if the group members post libelous and obscene messages. It was further observed that it was not required for the group administrator to first filter all the messages before they were posted ("WhatsApp Group Administrator", 2016). However, other countries such as Malaysia have examined the possibility that legal action could be taken against WhatsApp group administrators in case they failed to curb the spread of false information among members. This was particularly if it was felt that such administrators were jeopardising national security (Chong, 2017).

The District Magistrate of Kishtwar in Jammu and Kashmir issued a notice in June 2018, ordering all administrators of WhatsApp groups operating in the area to register with his office. This was seen as a measure useful in curbing false news and rumours in the troubled state (Sharma, 2018).

### Copyright Law

Digital forms of communication have posed many threats to copyright, given the ease and speed with which copies can be made and distributed. Intellectual Property Rights are the extension of property rights to the domain of intangibles, specifically rights accorded to persons over the creations of their minds. The creators are usually conferred an exclusive right over their creation for a particular period of time. The Indian Copyright Act, 1957, contains the law on copyright. According to this Act, a copyright exists in an original work which can be literary, artistic, dramatic, musical as well as cinematographic. Infringement of copyright pertains to the copying of a copyrighted work without the authority of the owner (Chakravarty, 2019). What can be done to protect copyright when content is being shared on an encrypted platform such as WhatsApp?

The Information Technology Act, 2000, defines an intermediary as "any person who on behalf of another person receives stores or transmits that message or provides any service with respect to that message". Since WhatsApp is a free application which provides cross-platform messaging and VOIP, the large number of users implies that it is probable that users would be posting or publishing copyright-protected material. However, the end-to-end encryption claimed by WhatsApp implies that the company is not aware of the content being shared on the platform. According to Section 51(a)(ii), a person who provides for profit a platform for communication resulting in infringement of copyright of some person and is aware of said infringement is liable.

Given the spectrum of crimes and regulatory issues WhatsApp can be a party too, it is evident that law will have to evolve to keep up with these developments. The next section seeks to extend the discussion on these regulatory issues that are current and often controversial.

## The Regulatory Framework: A Discussion

How/Why should new media be regulated? How should social media be regulated? How should social messaging be regulated? How should WhatsApp be regulated? Regulators, governments, citizens and corporations are struggling with these issues the world over. There remains a conflict over whether the responsibility rests with the government, platform or the user.

India and China are currently the two countries with the highest number of mobile telephones in the world. An increasing number of people are logging on to the Internet in India, often via low-cost smartphones. These vast numbers have implications for regulation, given the fact that the scope and scale is already so widespread. New (digital) media in India is currently regulated along certain dimensions which are briefly enumerated below. In general, provisions relating to the maintenance of law and order apply such as the Criminal Procedure Code (CrPC) and the Indian Penal Code (IPC) etc. More specifically, there are certain Acts and regulatory guidelines which are pertinent. These include the Indian Telegraph Act and the Wireless Telegraphy Act, 1885, which give the government exclusive privilege to provide telecom services, as also the power to intercept communication on various grounds. The Telecom Regulatory Authority of India (TRAI) Act of 1997 is another Act that regulates the telecom sector and this led to the establishment of the Telecom Disputes Settlement and Appellate Tribunal (TDSAT). The Information Technology Act, 2000, and the Intermediary Guidelines, 2011, provide the legal framework for overseeing the new media sector. This framework includes the recognition of electronic contracts, prevention of cybercrimes, electronic filing/documents and legalises digital signatures. Cybercrimes fall under the purview of this Act and it has also amended many criminal and evidentiary statutes, including the Indian Penal Code, 1860. Overall, the act and regulations burden the intermediaries with the responsibility of exercising due diligence while functioning, leading to screening of content and online censorship by the intermediaries (Narayan & Arya, 2016).

The overarching regulatory framework is, of course, the Constitution of India where the Fundamental Rights are enshrined in Part III of the Constitution. Article 19(1)(a) concerns freedom of speech and expression. Article 19(2) qualifies this right which is not absolute. The qualifications include reasonable restrictions on the freedom of speech and expression in the interests of the sovereignty and integrity of India, the security of the

state, friendly relations with foreign states, public order, decency or morality. Notwithstanding these reasonable restrictions on the freedom of speech, it is of vital importance in a democracy. It is for this reason that much of the debate on regulation of media, especially new media, concerns this provision (Narayan & Arya, 2016).

At the Central level, the Ministry of Information and Broadcasting of the Government of India governs and regulates information dissemination, broadcasting, radio, the press, films, advertising and visual publicity. The Department of Telecommunications (DoT) created in 1985 governs telecom in India. It is responsible for policy formulation, performance review, monitoring, international cooperation and research and development. It also administers the Indian Telegraph Act, 1885, the Indian Wireless Telegraphy Act, 1933, and the Telecom Regulatory Authority Act, 1997, with their respective amendments.

Recent changes include the Information Technology (Intermediary Guidelines and Digital Media Ethics Code) Rules which were notified on February 25, 2021, under the IT Act, 2000. This Act provides for the regulation of electronic transactions and cybercrime. Intermediaries are entities that transmit or store data on behalf of other persons. They include internet or telecom service providers, online marketplaces and social media platforms. Intermediaries' due diligence includes (1) informing about rules and regulations, privacy policy, terms and conditions of usage and service, (2) blocking access to unlawful information within 36 hours upon an order from the Court or government, (3) retaining information collected for the registration of a user for 180 days after cancellation or withdrawal of registration. Intermediaries are also required to report cyber security incidents. In a significant development, Intermediaries which provide the primary service of messaging must enable the identification of the first originator of the information on their platform. The originator has to be disclosed if required by an order from the Court or the government. Other guidelines for ethics and grievance redressal were also issued. ("The Information Technology", 2021, February 25).

Unlike Europe, India does not yet have a specific data protection, privacy and cybersecurity law. Privacy of communications on online messenger platforms such as WhatsApp and Signal are not directly protected by the provisions of the IT Act, 2000. As Kaushik Deka (2020) opines:

> Under the Indian Evidence Act 1872, even deleted chats retrieved through forensic analysis can be used as electronic evidence. However, in July 2020, the Supreme Court's constitution bench redefined electronic evidence norms in a landmark judgement in the Arjun Panditrao Khotkar case. It categorically said the police have to strictly follow the provisions under Section 65(B) of the Evidence Act concerning the digital output

produced and ownership of the device if they want to produce and prove electronic evidence in the court of law.

This implies the onus will have to be on the police to prove that the electronic evidence has been collected by legal means. Such evidence produced in court must have a certificate, stating that there is no addition, alteration or manipulation of the electronic evidence.

In October 2022, the Indian Government released new amendments to the 2021 Rules, notifying the Information Technology (Intermediary Guidelines and Digital Media Ethics Code) Amendment Rules, 2022. The salient changes notified under the 2022 Amendment are as listed below:

(1) All Internet intermediaries are now required to make "reasonable efforts" to ensure the user does not host, display, transmit, store update or share any information that is illegal, obscene, infringes any IP or is misleading, impersonating etc. (Singh, 2 November, 2022).
(2) All Internet intermediaries are required to publish their rules and regulations, privacy policy and user agreement in English or any language specified in the Eighth Schedule to the Constitution.
(3) According to this Amendment, any complaint seeking content that is defamatory, illegal etc. should be expeditiously acted upon and resolved within 72 hours of reporting.
(4) The 2022 Amendment also requires intermediaries to respect the rights guaranteed to users under the Indian Constitution. These are inclusive off due diligence, privacy and transparency.
(5) A "Grievance Appellate Committee" (GAC) will be appointed by the government to allow users to appeal against decisions or lack of action taken by intermediaries on user's complaints. The GAC was to be established latest by January 2023 (Singh, 2 November, 2022).

The implications of these Amendment Rules, 2022, are manifold. Firstly, the compliance burden on intermediaries has increased. Secondly, the risk to their safe harbour protections has increased. Thirdly, an additional layer of potential censorship has been introduced by Ministry of Electronics & Information Technology Meity wherein the GAC would have a say in what content stays up on the Internet and what does not (Tejasi & Waghre, 2022). While the freedom of the users and intermediaries appear to have been curtailed by the Amendments of 2022, the Government issued a fresh notification in the Gazette on April 6, 2023, regarding amendments to the IT (Intermediary Guidelines and Digital Media Ethics Code) Rules, 2021, with respect to online gaming and fake or false information about Central Government business ("Gazette Notification Vide", 2023, April 6).

In the opinion of some legal scholars, the Amendments Rules of 2023 on Intermediary Guidelines are tantamount to censorship. According to the 23 Amendments, the Union Government has added the provision of a fact-check unit to identify fake or misleading online related to the government. Intermediaries such as social media companies or net service providers would be required to take action on content identified by the government appointed fact-check unit, or they may lose their safe harbour protections. The "safe harbour" protections in Section 79 of the IT Act allow intermediaries to avoid liabilities for what third parties post on their websites. In addition, Section 69A of the IT Act, 2000, lays down the procedure to issue take-down orders. They also stand in opposition to the *Shreya Singhal v. Union of India* (2015) verdict which elucidated the guidelines for blocking content ("Draconian Rules: On" 2023).

## Conclusions

The furore that broke out over WhatsApp's new privacy policy proposed in late 2020 gives some indication that while WhatsApp and its parent company the behemoth Meta have a large number of users in India, they may not be able to take them for granted in the years to come. In May 2021, the platform claimed that its privacy policy was similar to other companies such as Microsoft, Zomato, Google, Zoom, True caller, Aarogya Setu and others. It also told the Delhi High Court that the privacy update of 2021 was not mandatory and users were not forced to accept the same (Aditi, 2021). To accept (the user) the new privacy policy of WhatsApp or leave the app approach on the part of the company does not take into account the network effect where people derive benefit from the networks of their established WhatsApp groups, so quitting the app may seem a difficult proposition. The sharing of users' metadata with Facebook/Instagram/other entities for commercial purposes may be considered an infringement of the privacy of the user. In many developed countries in Europe, this invasion of privacy is not accepted as privacy is closely linked to dignity of life, a value also enshrined in the Indian Constitution (Bhattacharya, 2021). Europeans have the protection of EU privacy laws and proactive regulators, but Indian users have the protection of fewer privacy laws. However, the Digital Personal Data Protection Bill of India is yet to be implemented (Williams & Kamra, 2021).

The current approaches to regulation seem to be tilted towards holding the user responsible. Media literacy efforts on behalf of certain large digital media companies are geared to making users more aware and more empowered. While they are certainly a step in the right direction, by themselves these initiatives may be insufficient. However, the average

WhatsApp user has a long way to go in terms of being media literate. Shifting the onus of responsibility to the end user by relying on media literacy efforts may not be advisable in the current scenario where even formal literacy stands at about 78% of the population and digital media literacy and social media literacy are a far cry. Also, as pointed out in a study done by the London School of Economics, mere functional literacy might not be enough; users need to be taught critical media literacy skills (Banaji & Bhat, 2019, November 11).

While evidence based on WhatsApp messages or calls is currently being used in matters such as divorce cases, in other issues such as hate speech, the link between the messages and the crimes committed may not be easily established. However, as indicated by the authors' survey detailed in the chapter on misinformation, forwarded messages have been able to change the minds of recipients – students and the armed forces – alike. This needs greater study but, clearly, regulators need to view WhatsApp as much more than a messaging app.

The WhatsApp company and its parent company Meta is in a quandary where end-to-end encryption is the claim and the popularity of the app is in part based on this. However, in the case of crimes being linked to WhatsApp messages, videos and calls, the government may exert pressure on the platform to trace back the originators of certain "problematic" messages. This implies de-encryption of content. In this scenario, many users may end up feeling insecure and stop using WhatsApp and migrate to its competitors, or stop using these services. Hence there is resistance to the platform seeking to regulate the content of messages beyond declaring a few rules of usage. Users also may feel that their privacy has been infringed upon by the government or by the platform. Technical issues regarding traceability of messages may also be a problem.

The Amendments of 2022 and 2023 notified by the government has put pressure on Intermediaries such as social media platforms and internet service providers. With their "safe harbour" provisions of protection under threat and the attempts by the Central Government to extend its control over intermediaries, and/or users, the issue of content on and the functioning of social media platforms is likely to be contested in the near future.

As is evident from the discussion here, regulation of new and social media is evolving and fraught with several novel problems. Regulation of an encrypted social messaging application has many perils and pitfalls for the various stakeholders. This is true of WhatsApp, as well as its competitors Signal and Telegram that are social messaging Apps, relying on encryption. Yet the difficulties in completely protecting a person's digital communications imply that it is vitally important to have a robust legal framework that protects user's privacy and ensures data are not misused.

To add to the discussion on the issues concerning regulation of WhatsApp, the authors asked Varun Sen Bahl, lawyer and manager, Public Policy at Nasscom, his views. Here is an excerpt:

*Q:* WhatsApp claims it is merely an enabler and is unable to read the content posted. What is their liability for such content? Does the responsibility lie with the end user or the platform when we are looking at regulating encrypted content such as on WhatsApp? Further, what are the implications of the 2022 and 2023 Amendments to the Intermediary Guidelines regarding regulating WhatsApp?

*A:* First, setting up some basic facts about how the law operates here. The law distinguishes between creating illegal content and distributing it. While users creating illegal content would always be held liable as authors, distributors *can also* be held liable if this is provided for in the relevant enactment. In a case regarding illegal content circulated through WhatsApp, both the user and WhatsApp as a distributor may be charged. However, codified into the Information Technology Act (IT Act) is a legal defence, or "safe harbour", that WhatsApp can claim to avoid being held liable.

This "safe harbour" is only available if WhatsApp can successfully demonstrate, in line with the tests in the IT Act, that it did not have the knowledge of illegal message of relevance. The use of encryption makes this easier to do, as WhatsApp claims it cannot, by design, know the contents of any message. However, the IT Act does not allow WhatsApp to rely on the "safe harbour" so easily. It states that, in some scenarios, WhatsApp can be *deemed* to have knowledge. If any of these scenarios is met, then WhatsApp can be proceeded against as a distributor (though not automatically held liable and penalised as that must be separately assessed based on the precise law being violated).

The list of scenarios of "deemed knowledge" are set out in the IT Act and in the Intermediary Guidelines and have been expanded in the 2022 and 2023 amendments. In brief, there are three main scenarios. Firstly, if WhatsApp receives a court order or a notice from a government instructing it to remove a potentially illegal message, and it fails to do so. Secondly, if it receives a user complaint notifying it to "act on" any message that violates the law or its own policy, and it fails to do so; here, it is unclear what action would be considered as sufficient for WhatsApp to still claim the safe harbour. Third, WhatsApp is also obligated to make reasonable efforts to *"cause"* users not to upload illegal content; here, again, it is unclear what WhatsApp must do to claim the safe harbour successfully. This is an evolving area of law.

*Q:* Are the recently introduced features (such as limiting of number of people you could forward a message to, marking of messages as being

forwarded many times etc.) on WhatsApp enough to prevent misuse of platform for rumour mongering?

*A:* While answering this conclusively will require considerable research, from research studies it appears that the new features may be helping. A 2019 MIT study (Melo et al., 2019) found that the forward limits were able to reduce the forwarding of messages generally. However, they were not enough to stop highly viral messages from reaching wide networks quickly. Another 2022 NTU Singapore study (Tandoc et al., 2022) (funded by WhatsApp), found that users were more likely to interrogate the reliability of messages tagged as forwards. While all this is promising, we must resist the tendency to exclusively rely on interface features, as bad actors will continuously find ways to bypass them. Much more hard work and investment is required in making people less susceptible to rumours and their cognitive effects. As Chinmayi Arun (2019) argues, rumours are spread across multiple services and media, not just WhatsApp, and result in harm, such as lynching, because they are one of the many triggers of societal fault-lines. Technology cannot substitute for tolerance.

*Q:* How are other countries dealing with the issues relating to encrypted messaging platforms vis-à-vis national security and circulation of fake news?

*A:* In recent years, governments have become increasingly uncomfortable with the continued unrestricted use of encryption in messaging platforms. Many countries, including those in the West (such as the UK and the EU), have explored ways to regulate the use of encrypted messaging platforms. In Australia, the government introduced a new law in 2018 ("New Law In", 2018) that can be used to force digital service providers to "remove electronic protection" as a type of legally mandated technical assistance to be provided to law enforcement agencies. This has been fiercely criticised from multiple quarters. It remains to be seen where international consensus settles on this issue.

*Q:* What does the new privacy policy of WhatsApp, which links it to Facebook, for pushing targeted advertising mean for an average user of WhatsApp?

*A:* After WhatsApp was acquired by Facebook (now Meta) in 2016, Meta started receiving some user data from WhatsApp under a data-sharing arrangement. When WhatsApp updated its privacy policy in 2021, the fact of this arrangement came to light and ignited public discourse. It is difficult to determine the precise implications for average users of the new privacy policy just from its text; analysis of the precise technical processes will also be required, which is beyond the scope of this response.

That said, surrounding reportage indicates that under the new privacy policy (Newman, 2021) while the *contents* of communications of WhatsApp (messages

and photos) are encrypted and thereby only viewable to users, Meta does get access to "metadata", or data about users' devices and behaviour, including their phone numbers, device identifiers, and logs of how long and how often they use WhatsApp. WhatsApp may also share, with users' specific permission, with Meta transactional and location data. Notably, the Supreme Court of India has, in 2023, directed WhatsApp to allow Indian users to continue using WhatsApp without accepting the 2021 privacy policy. Users opting out will be able to use WhatsApp, but may not be able to access all features **(**Singh, 2023).

*Q:* Constitutionally speaking, national interest overrides freedom of speech or is it the other way round? How is WhatsApp regulated keeping in mind this balance between freedom of speech and national security?

*A:* Under the Indian Constitution, freedom of speech is a fundamental, but not an absolute, right. While the general rule is that it overrides "national interests", the Constitution permits the legislature to establish, by law, exceptions where it feels the balance must shift in favour of the latter. The Supreme Court of India has, through numerous judgements, set out the principles that guide and constrain this balancing exercise. It is through this constitutional framework that legal obligations that place national interests before freedom of speech may be established. Such obligations have been imposed on WhatsApp through the IT Act. Amongst others, it must remove or block content notified to it by courts or the government, or assist investigating agencies with intercepting communications. Notably, the constitutional validity of such obligations have been challenged before the Supreme Court; these matters, which are still pending, suggest that the balance is not what all would consider as definitively struck one way or the other ("Why Five Petitions", 2019).

*Q:* Can a person protect themselves legally from charges of circulating hate content via messaging apps, even if they are merely forwarding those messages?

*A:* Courts have not yet arrived at a clear stance on personal liability for forwarding hateful content. However, it is worth noting that, in 2018, the Madras High Court had denied an anticipatory bail plea to a prominent journalist-turned-politician who had allegedly "forwarded" problematic social media posts on the ground that "*forwarding social media posts equal to endorsing it*" and that the applicant was a public figure whose posts had the potential to sway public opinion. While this is by no means a precedent, it may embolden efforts to impose charges of circulating hate content on persons forwarding such content.

*Q:* Most of the messaging apps being used in India have their parent companies abroad as well as servers outside of India. Would it be prudent

as a nation for the government to protect its national interest and the interests of its domestic users by developing their own social media platforms? Comment on the case of China in this regard.

*A:* The development of a "national" social media platform may not be the best use of public funds. The many Indian-origin social media platforms already competing with global players in the Indian market would be even more disadvantaged by the entry of a government-sponsored platform. There is also a high risk of a conflict of interest, since the government would be both a market participant and a market regulator and would be incentivised to favour its own services. A more pragmatic investment would be to bolster the capacity of our courts for hearing and resolving content-related disputes.

*Q:* The focus on regulating content on social media in India is mostly on content in English; however, our Indic language content is equally thriving. What are the challenges faced by India in monitoring content in regional languages?

*A:* Content regulation in any language is difficult and the challenges faced by regulators are distinct from those faced by platforms. My response focuses on two key challenges facing platforms that merit detailed examination. Firstly, many platforms use, out of practical necessity but also to meet legal obligations, automated systems to detect and remove concerning content from public visibility. These are often trained in English. A recent study from the Center for Democracy and Technology (2023) discusses how such systems cannot be easily applied to other languages without accuracy and efficacy losses, due to unique grammar, semantic, contextual and cultural differences, which points to the need to "localise" them (Nicholas & Bhatia, 2023). Secondly, global platforms, including Meta, have been called out, including by its own Oversight Board, for under-investing in content moderation efforts in India ("Non-English Content", 2022). Areas of improvement include ensuring its content moderation policies are made available in Indic languages, hiring more content moderators that are well-versed in the nuances of these languages, their contexts and communities; and encouraging and supporting the development of fact-checking services that are able to track how content in regional languages spread and create counter-speech.

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# 7

# WHATSAPP AND DISABILITY

## An Enabler?

### Introduction

> *Kabir's fingers moved over the smartphone keypad almost caressingly. He tapped a key and checked his WhatsApp message. They were in audio format. The boy is visually challenged. WhatsApp has become his lifeline for socialization and also for his job search. Speaking to the authors at Delhi he said that he used the voice features on WhatsApp to connect with his friends, family and also to hunt for a job.* (Kabir [name changed], personal communication, 1.4.2018)

After the United Nations Convention on the Rights of Persons with Disabilities (PwDs) came into force (UNCRPD, 2007), disability is increasingly understood as a human rights issue. According to the landmark World Report on Disability (2011) published by the World Health Organization and the World Bank, "disability is complex, dynamic, multidimensional and contested". In recent decades, the disabled peoples' movement coupled with researchers from the social and health sciences have identified the role of social and physical barriers in disability.

> The transition from an individual medical perspective to a structural social perspective has been described as the shift from a 'medical model' to a 'social model' in which people are viewed as being disabled by society, rather than by their bodies.
>
> *(World Health Organization & World Bank, 2011)*

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Reality is actually more complex and tries to seek a balance between the two models. Interaction between health conditions and social factors is a "bio-psycho-social-model". "Disability can be conceptualized as a continuum from minor difficulties in functioning to major impacts on a person's life" (World Health Organization & World Bank, 2011, p. 22). Many countries have attempted to collect data on prevalence of disability in their nations via censuses and surveys. For many, the approach has changed from "impairment" to "difficulty in functioning approach".

The most widely understood definition of disability in current times comes from the medical field and implies limitation in functioning. After the experience of the world wars, it came to mean a "range of physical, sensory and mental conditions labeled as abnormal or disabling". The medical definitions often ignored the social and structural sources of disability. The social models of disability emerged from the disabled person's movements in the United States and Europe in the 1970s and the 1980s. The social models of disability on the other hand serve as an important way of remedying injustices faced by disabled people by shifting the focus of service providers from individual solutions to removal of barriers for participation in mainstream activities. Thus, inclusion and empowerment are the guiding principles of the social models of disability (Ghosh, 2016; Olkin, 2022).

The medical model has been influential in defining disability even in international organisations such as the United Nations and the World Health Organization. The United Nations Standard Rules on the Equalization of Opportunities for Persons with Disabilities (1991) understand disability in terms of physical, intellectual or sensory impairment, medical condition or mental illness which may be transitory or permanent ("Standard Rules on", 1991). The World Health Organization devised the International Classification of Functioning, Disability and Health to refer to disability as a broad term covering impairment, activity limitations and participation restrictions ("International Classification of", 2001). As opposed to these earlier medically influenced definitions of disability, the United Nations Convention on the Rights of Persons with Disabilities (UNCRPD) 2007 specifies that states ("Convention on The", 2007) have a positive role in

> promoting, protecting and ensuring the full and equal enjoyment of all human rights and fundamental freedoms by all persons with disabilities, and to promote respect for their inherent dignity. … Based on the premise that human beings have inherent dignity, which entails the enjoyment of all human rights, persons with disability are unconditional (human) rights based holders.
>
> *(Ghosh, 2016, pp. 1–6)*

The exclusion and discrimination faced by many PwDs has been understood to be both an economic and a human rights issue globally. The PwDs accounting for 15% of the world population have faced difficulty in seeking education and employment, and becoming self-sufficient, which is a welfare burden, as well as undermines their rights and dignity. Thus, PwDs represent the world's largest minority (World Health Organization & World Bank, 2011, p. 29).

Approximately 80% of PwDs live in the developing countries, according to the UNDP ("Factsheet on Persons", n.d.). There is also a clear linkage between poverty and disability. The World Bank estimates that about 20% of the world's poorest people have some kind of disability and are often considered to be the most disadvantaged in their communities. In addition, unemployment rates are higher and education levels lower for PwDs than those without disabilities in the majority of the countries (ibid.). What could be a game changer in helping to empower persons with disabilities who may be facing the double whammy of poverty as well? Communications technologies may have some solutions to offer.

Access to Information and Communication Technologies (ICTs) has been recognised as an important way to deliver various development goals. Two factors have come together in changing the paradigm on using technology to push for inclusion and full participation of PwDs in society. The first factor is the increasing usage of ICTs for service delivery, governance and welfare objectives. The second factor is the increasing provision of disabled-friendly functionalities by mainstream devices such as mobile phones and computers. For example, functionalities such as text-to-speech, voice recognition, screen magnification, change contrast and touch and gesture input are now part of standard ICT devices such as smartphones, whereas earlier they used to be stand-alone specialised software and hardware (Ford Foundation & The Centre for Internet & Society, n.d.; Raja, 2016).

While the Internet is penetrating our lives more than ever, the interaction of disabled persons is different from "abled" persons as regards the Internet. Disabled persons may find it difficult to use the Internet because of lack of text captioning, difficulty in using the keyboard, or the mouse, and difficulty in seeing the screen. The Internet however has a lot to offer disabled persons since they can use it for independently gathering information, entertainment and socialising. For disabled persons to benefit from the Internet, it needs to be accessible to them. Accessibility is defined as the level to which a product or service can be used by a disabled person as compared to a person without a disability. Some simple examples are buildings made wheelchair accessible by ramps and elevators being fitted with Braille notations and audio announcements. According to some estimates, over a billion people have some form of disability; this being the largest minority globally. This figure is likely to increase as the population ages and older people acquire some

form of disability (Ford Foundation & The Centre for Internet & Society, n.d. pp. 24–39).

It is estimated that about 80% of the world's PwDs live in developing countries. There exists a digital divide between rich and poor countries in accessing the Internet and benefitting from it. Unless ICTs are designed to be accessible to PwDs, they can suffer from a "disability divide", as ICTs can exacerbate the gap between "able"-bodied persons and PwDs (Raja, 2016). The disability divide is especially relevant for PwDs living in developing countries, since the bulk of the world's PwDs reside there.

India has a substantial number of disabled persons, approximately 2.2% of the population in 2018 (Kanwal, 2022). Of this segment about 1.9% are women. India has historically been a disabled-unfriendly country with inaccessible and unaffordable public services and technologies, unsupportive regulation and inaccessible websites. The equality of disabled persons and right to full participation in society was recognised in India with the Persons with Disabilities (Equal Opportunities, Protection of Rights & Full Participation) Act enacted in India in 1995 ("The Persons With", 1995). This was an important step as this Act calls for education, employment and social security for the disabled; removal of barriers to access; and discrimination for them. It specifically calls for evolution of policy in this regard, implementation of laws and policies of the Act, monitoring of implementation and redressal of grievances.

India is also a signatory to the UNCRPD (2007) and the Biwako Millennium framework (2002) towards an inclusive society for disabled persons across Asia and the Pacific ("Biwako Millennium Framework", 2002). According to a study by the National Centre for Promotion of Employment for Disabled People, even though PwDs constituted a significant minority of India's population, their employment needs were not met ("Employment Practices of", 1998). This is in spite of the People with Disabilities Act, which reserves 3% of government jobs for PwDs ("The Persons With", 1995). In 2013, the National Policy on Universal Electronic Accessibility was approved by the Union Cabinet. This policy attempts to remove discrimination and promote equal access to electronics and ICTs for the PwDs (Ford Foundation & The Centre for Internet & Society, n.d., pp. 24–39).

Across the world the device of choice to connect to the Internet is the smartphone, rather than the tablet or the computer ("Digital around the", 2023). The mobile phone has also emerged as the most crucial ICT platform for connectivity as far as disabled persons are concerned. This is particularly so with the advent of smartphones with their multifaceted functionalities (Satari, 2021). Social networking platforms, unlike government services, do not mandatorily have to provide special features for providing access to disabled persons. Notwithstanding that, new media, and social media

in particular, have a range of benefits for disabled people. They encourage participation, information exchange and entertainment, and are empowering and enabling even in education and employment. They are inclusive and help differently abled persons as they have the range of text, audio and video and are less challenging to use than computers for many people.

WhatsApp and Facebook have emerged as two very popular social media platforms to be used by disabled people. WhatsApp has some obvious advantages where disabled persons are concerned. The application is easy to install and easy to use. If one has Internet connectivity, it is free. It allows for two-way and group interactivity in a simple way. It has special features such as voice-to-text messages. It also incorporates voice and video calling within it in a quick and easy way. WhatsApp can also be downloaded on the PC and can be used as WhatsApp Web. Disabled persons can also use it for socialisation and staying connected to friends and family (Shigri, 2017). Facebook has been used extensively by disabled persons. It encourages participation, creates a common platform with its online communities, helps disabled people to come together for a cause and exchange information and share their views. It can also be used for business.

Some social media have been the object of suspicion in the wake of the Cambridge Analytica scandal, but they are a vital lifeline for disabled people. While paradoxically there has been talk about digital detox and logging off from the net because of the harmful effects of social media, it has benefits for marginalised people, especially disabled ones. Social media offers the promise of inclusion; virtual friends take the place of real-life interactions for disabled persons who have problems with mobility and leaving their homes. In the United Kingdom, fewer disabled people are accessing the Internet in percentage terms as compared to the general population (Ryan, 2018). This is also the case with mobile-disabled accessibility gap across Asia and Africa (Satari, 2021).

The intersection between smartphones and disability is evident in the fact that the single wheelchair emoji or visual symbol representing disability was not considered enough and Apple had proposed more options for depicting disability in emojis to Unicode, the body overseeing it. Emojis are a common way of expressing emotions via online communications, including WhatsApp ("Apple Proposes 13", 2018).

Yet another example of social media and disability intersection is the fact that the social media platform Twitter updated its reporting guidelines to include content targeting persons with disability to be a violation of its policy. The guidelines indicate that it is against Twitter's rules to allow Tweets against a protected category, including race, religion, gender, orientation and, most recently, disability. The objectionable content could include threats, slurs, hateful imagery etc. that spread hostility and dehumanise others (Chadwick, 2018).

The current study investigates certain aspects of disability in the context of WhatsApp use in India. A few cases have been culled from secondary research to throw some light on the subject and outline its contours. This serves to set the stage regarding both opportunity and challenges that WhatsApp offers as platform that PwDs can use. These include WhatsApp, enabling the learning of new applications by challenged persons, the creation of support structures and information sharing networks, service delivery for PwDs by government officials and even the use of a WhatsApp number by police authorities to make criminal complaints by PwDs. This section is followed by the primary research undertaken by the authors wherein case studies have been compiled, delving into different categories of disabilities such as visual, speech and hearing, motor and intellectual disabilities. Lastly, a short critical commentary completes the chapter.

### Learning New Applications

A visually challenged person Shankar Chandrasekhar, who was born with no vision and with limited use of his arms, has overcome huge obstacles to become independent and is technically well qualified. Today he works as a software accessibility tester in Noida, India. He credits the Internet as being fundamental to his success. According to him, "Internet is useful for everyone, but in my opinion visually challenged can't lead their lives without it. From learning new things to money transactions, I rely on the Internet for 95% things I have to do". He formed a WhatsApp group to learn new media applications and to help other challenged persons to use the Internet and applications, to share knowledge, to make their lives easier and more productive. He has also started a YouTube channel called *Tech Accessibility Tutorials*, where he uploads videos to instruct visually challenged persons to use different Internet applications (Singh, 2017).

### Support Structures and Sharing Information

Amara Telang, a young 25-year-old had to have a leg amputated due a freak accident seven years ago. While the doctors and prosthetists explained the medical procedures to her, she had many questions which were only answerable by other amputees. Three years after her accident she found solace in a WhatsApp group of fellow female amputees. The group was started by Sneha Kale, Darshana Deshmukh and Manasi Joshi, who first connected on Facebook; they had the same prosthetist. As of October 2017, the group had 14 members – women from Mumbai, Bangalore and Maharashtra. The WhatsApp group provides advice rooted in experience for amputees such as Telang. The advice on the group ranges from what brand prosthetic to choose to marriage and relationship issues for

the members. The members of the WhatsApp group encourage each other and serve as positive role models as they are independent, confident and in relationships. The WhatsApp group helps the members in finding support and positivity in dealing with the obstacles they encounter in their daily lives (Baruah, 2017).

There is a group called WhatsApp for the Deaf in World on Facebook. Here people can interact and share news, opinions and entertaining content. They also advocate for more content to be available in sign language and for mainstream content to be subtitled, or captioned so that they can view such content ("WhatsApp for the", 2015).

### Service Delivery

Rohini Bhajibhagare, the District Collector (government official) of Salem in Tamil Nadu, received an anonymous WhatsApp message showing a disabled woman called S. Malarkodi crawling on her hands and knees in her district. The message requested that a tricycle be provided to her. Bhajibhagare dispatched her district disability welfare officer to look into the case of the woman. Finding the problem genuine, a tricycle was purchased and handed over to Malarkodi by the collector. What is remarkable is that this happened within the space of a day, enabled by a WhatsApp message. Efficient administrators have reacted promptly to the WhatsApp message and improved the life of a low-income woman suffering from a disability (Raja, 2018).

### Crime

A WhatsApp number was launched by the Inspector General of police in Kanpur in 2015 in order to facilitate registration of complaints by hearing and speech impaired persons. The number was 704020202 and it was touted to be *Ek number bharose ka* or a number you can trust. Through this WhatsApp number, the differently abled persons could lodge a complaint through a video or text message. The video messages could be recorded in sign language. The police station made facilities for interpreting such complaints made in sign language. A police team is then dispatched to deal with the complaint and the sign language complaint is converted into written complaint for registration of First Information Report (FIR) if need be "WhatsApp Number for" (2015).

### Current Study

Building on their earlier research in the area of new media and disability in India, the authors examined the use of WhatsApp by persons with

visual, speech and hearing, as well as motor and intellectual disabilities. The starting point was secondary data, including published books, articles and reports, followed by in-depth interviews and a focus group. The case studies were based on interviews with persons with disabilities, as well as activists and persons working in the area of specific disabilities.

### *Case Study 1: WhatsApp and the Visually Impaired*

#### *Background*

The authors conducted a focus group interaction with four boys with 100% visual disability, in the age range of 18–19 years old, studying in Class 12. The institution where they were studying is a residential co-educational school named Janta AadarshAndh Vidyalaya, being run by a non-governmental organisation in New Delhi. The families of the children studying in this institution were mostly underprivileged. One boy had recently got employed as a Class 4 level official in the Reserve Bank of India. All four of the youth had their own phones, which were smartphones. They said the phones were being provided by the government, but some of them had bought their own. There was no Wi-Fi in the school, so they were spending their own money for mobile data. The Jio service being provided by the Reliance company was the favoured data service provider as its packages were considered to be cheap by the students. Prepaid plans were mostly being used. Separate data packs were being used from their call service providers. The boys were not willing to be identified by name (Students of Janta Aadarsh Andh Vidyalaya, New Delhi, personal communication, 1.4.2018).

*Q:* How do you use a phone if you are visually challenged?
*A:* App called TalkBack is mostly used or else text-to-speech function.
*Q:* How do you actually use it?
*A:* (the students give a demo on how they use the facility. The voice feature reads out the screen. Only when they double tap on an icon does it open. We find they keep the voice at high speed or else it takes very long to read out all screen content. We find it difficult to follow the accented fast-forwarded voice but with long use, they find it easy to follow.)
*Q:* What brand of mobile phones are you using?
*A:* Samsung, Karbonn. (We asked for a WhatsApp chat demo, but that was not completed due to inordinate time being taken.)
*Q:* Do you use text or voice notes in your WhatsApp chats?
*A:* It's a mix. For us, it's as easy to use either. We use less of voice notes.
*Q:* Can you share any conversations with us?
*A:* (Screenshot taken) While scrolling, we put the audio on mute because otherwise it's very confusing with so many texts being read out at once.

Their question – Why are you writing on this subject?

Authors: Because we want to understand how it's making a difference. We are researching about disability and new media, and this is part of that.

*Q:* What else do you use?

A; Not only WhatsApp, we use every other social media too. We know how to use Facebook, Twitter.

*Q:* Are you on Twitter too?

*A:* No, we are not there but we can be, we know how to use it. We are as curious about these platforms as others. But Twitter users are people who are "bade log" (important people) so we're a bit shy.

*Q:* What kind of things do you talk about on your groups?

*A:* Videos – knowledge videos.

*Q:* Do you exchange music videos?

*A:* Yes, sometimes, if there is something nice, also text messages, but mostly stuff related to "knowledge".

*Q:* Do you talk only for learning or also for entertainment?

*A:* For example, right now it is exam time. If we need to send our Admit Card, we will take a picture and send it. Like that.

*Q:* What about you, Vinit (name changed)?

*A:* I rarely use WhatsApp, and if I use it, it's only for "studies". Sometimes I use it to chat with friends.

*Q:* What about chatting with family?

*A:* No, I don't use it for family. At least I don't. (Others say they talk on phone to their families, instead of using WhatsApp.)

*Q:* Where are you all from and do you visit your families?

*A:* Girish, name changed) I'm from Allahabad, (Vinit, name changed) I'm from Sangam Vihar, Delhi, (boy 3) I'm from Bihar and (boy 4) I'm from Farrukhabad. And we do visit them. (The four children replied.)

*Q:* Your families must be using WhatsApp?

*A:* Yes, of course. Most of the phones have been given by the government to us as gifts (and we do not have our own choice in that). I'm not much in favour of it, but, for instance, my brother wants to chat with me on WhatsApp so I cannot *not* reply, so I chat with him sometimes. Since he's younger than me, I feel obliged to respond to him, to advise him which I do on WhatsApp.

*Q:* Do you also share information about jobs etc.?

*A:* Yes, we do.

*Q:* Do you think WhatsApp is more useful than Facebook or Twitter?

*A:* Facebook allows us to increase our network with people who know more, and the possibility of their being more active on social media is also there. We can search for whoever we want on Facebook. Whereas on WhatsApp, our friend circle is limited to those who we know personally.

We can search for the kind of people we need on Facebook, whereas we are limited in our choice on WhatsApp. But if we need to send any important information, we use WhatsApp.

*Q:* So, do you think Facebook is better for you or WhatsApp?

*A:* Both are good for us, depending on our use. Though right now I've turned off Facebook totally and am using WhatsApp only.

*Q:* Facebook also has Messenger service. Are you using that?

*A:* No, we are not using it so far. We are using WhatsApp whenever some important message has to be conveyed. We have made a group "Only for Information" on WhatsApp for information relating to exams and recruitment, especially regarding those applicable for our disability.

*Q:* Do you get forwarded messages wishing Good Morning or other irrelevant stuff?

*A:* Yes, we do get those "faltuwaale messages" (useless messages), which keep coming, that is normal. Sometimes we get annoyed and tell people not to send. We do try to tell others to not fall in the trap of superstitious messaging (such as those messages which urge you to circulate a message eight times or else).

*Q:* What about political messaging? Did you get any such messages during the elections in UP?

*A:* Those were "jaatigat" (communal) messages which keep coming, this is common in politics.

*Q:* Did your groups get such messages?

*A:* That's a very natural thing. Not during the elections but around the time of release of the movie Padmavat, there was this boy from Uttar Pradesh, from Kashi Hindu Vishvadyalay I think, he might have had knowledge of history or not, I'm not sure. But when I shared on the group named Rudra Institute, a message regarding the Rajputs, not really against them but about their looting and stealing, that guy got annoyed and commented that I didn't know anything about history. Only when there is opposition to anything you start looking at things. Then, I also commented asking if he knew that Padmavat was authored by Malik Muhammad Jaaysi, it's fiction, it's not real, it's something from his imagination. Then he started saying all kinds of things.

*Q:* Anything else you would like to add about WhatsApp? Are you aware whether girls are using WhatsApp in your school?

*A:* We know about ourselves, not about them.

*Q:* Why, don't you all chat with girls on WhatsApp?

*A:* Not with us, but we don't know if they chat with others. Perhaps they are not "trained" to use it. We were among the first to get mobiles from the government. We didn't know how to use them at all, we didn't even know how to dial a number. Then we kept trying to learn and muddled through to know enough. Since we had those mobiles, we kept using them and if you have a thing, you somehow learn to operate it.

**FIGURE 7.1** Focus Group Discussion with Visually Challenged Students.

*Source:* Authors' photo

*Q:* Any interesting incident about WhatsApp?

*A:* There's nothing like that to mention. When we didn't know how to use, we had to keep asking seniors about settings and how to correct them, and they would help us out.

*Vinit (name changed):* I believe that WhatsApp is not particularly useful. When I had recently got onto WhatsApp on my mobile, I was continuously on the phone. (Girish (name changed) interrupts Vinit (name changed) to say that for most people it is like that when they begin to use anything because if they want to learn about it, they have to give it time.) So, to overcome this problem of overuse, I uninstall WhatsApp, so if it is not there, I won't get obsessed with it. If WhatsApp is there and a message comes in, one is tempted to take a look at that message.

### *Case Study 2: WhatsApp and the Hearing and Speech Impaired*

#### *Background*

The authors interviewed Dr P.J. Mathew Martin, Associate Professor at Ali Yavar Jung National Institute of Speech and Hearing Disabilities

(Divyangjan), AYJNISHD(D), Mumbai in 2018. Dr Martin has been researching the area of media and disability, especially new media and hearing- and speech-impaired persons. He has valuable insights into the use of WhatsApp by speech- and hearing-impaired persons. Dr Martin believes that the Deaf Community prefer to use sign language videos in their WhatsApp groups as compared to text-based content (P.J.M. Martin, personal communication, 5.7.2018).

*Q:* Is the Deaf Community using WhatsApp for communication?
**A***:* Yes. They are using WhatsApp for communication. They are using it in their groups.

There are two or three groups that I am aware of, and I am also a member of these groups. These groups are in various domain areas of society, one of them is the spiritual group (Bombay Centre for the Deaf), another in service sector, some others have a bank employees group (of the deaf), Other Sign Language Promotion group (of the deaf) etc. Different members are in these groups in various domains. I am into these WhatsApp groups, have been observing them and also doing some research about their communication patterns. In order to understand their communication behaviour of these deaf groups using WhatsApp group Application, I used "Big data Analysis".

*Q:* How is it exactly helping them to communicate with each other?
*A:* WhatsApp is helping them a lot in many ways. One is instant messaging, in terms of text messages to communicate with each other in the WhatsApp group. But the problem is the text they use for communication, they do not use the exact grammar of English Language that we use for communication. Hence one might fail to understand what exactly they are communicating, unless one is aware of the context of the words. Many of them are pushing in videos on the WhatsApp group. They shoot (a video of) themselves using the mobile phone camera, the concept and ideas they would like to communicate in the form of "sign videos", which are videos made using sign language and share it. These sign language videos being shared in the WhatsApp group are about the problems they face, the issues they have come across in life, for example absence of sign language interpreters, and the need for interpreters etc. Recently, there was one interesting sign language video on an issue. This "sign video" was from America … in American Sign Language.
*Q:* Yes?
*A:* It was about (a conspiracy theory regarding) the twin towers coming down in the 9/11 attack in America. It argued that the twin towers actually did not come down due to the hit by the airplanes alone. But there were other terrorists working to bring down the towers before the

airplanes hit. There were certain specific features that were observed after the blast, as evidence for this theory. The entire video was done in American Sign Language (ASL). This was pushed into this group of Deaf Community, using Indian Sign Language (ISL). And this was accepted and comfortable to the group. There is so much communication in WhatsApp groups that comes from others outside the country. Not only that, there are several other videos being shared in the WhatsApp groups. In fact, recently WhatsApp application has added live video communication, which was earlier available in "Skype" or "IMO" etc. So, they use these "WhatsApp" features to video call, and communicate with each other in the group easily. These are some of the advantages.

*Q:* So, you were telling us that there are international videos that are coming into these "WhatsApp" groups of the Deaf Community?

*A:* Yes, definitely. In fact, sign language is a concept-based language and even if the Deaf Community using Indian Sign Language does not fully understand ASL, as their vocabulary might differ, they understand the concept and the ideas in the shared video. Even I follow some of the concepts shared in the ASL video.

*Q:* Do the members of the "WhatsApp" group use it for jobs or just socialising? Or how is it used?

*A:* It is not just socialising that they do on WhatsApp. They even use it for clarifying issues; for example, there was this sign language video with questions and answers on the usage of Aadhaar Card[1] and linking it with bank accounts and mobile phone numbers. … So more than socialising, WhatsApp is now being used for learning, discussion on social issues and (using) something like the dialogical approach that we have for learning.

*Q:* Pedagogical processes in the dialogical form?

*A:* Yes, learning process is taking place through a dialogical approach, while using WhatsApp among the Deaf Community. They have a dialogue, for example in the discussion of why we should link the Aadhar number with bank accounts and mobile phone numbers. There was discussion on this in the WhatsApp group, about its advantages and disadvantages and the need for it. Another example is the discussion that took place in the WhatsApp group about our own institute's online registration for appointment for various hearing tests using www.ors.nic.in. In the discussion I was also a participant and shared the significance of the registration, its advantages, no waste of time and the reduced number of visits to AYJNISHD(D) etc. on WhatsApp group of Deaf Community of Mumbai. I also clarified certain doubts they had. They seem to have learned and understood. They also agreed that it decreases lot of waiting time. That kind of learning is taking place. It is not just friends

socialising, saying good morning, etc. on these groups as such messaging is very less in these WhatsApp groups of the Deaf Community, compared to the hearing group. That is what I find in my research on social media like WhatsApp among the deaf. This is what I also find as an interpreter in the Deaf Community WhatsApp group. When I compare how they use it vis-à-vis the hearing group, I find the Deaf Community is really into some specific issues; they communicate with each other in a specific manner with purpose. Also, they put up certain issues on Facebook and then link it to the WhatsApp group, enabling convergence or mixing up of social media platforms, to explain more specific details and discussions on the topic or issue.

*Q:* Do the WhatsApp groups consist of both kinds of communities, the Deaf Community as well as hearing persons?

*A:* Mostly the Deaf Community, though they do entertain some of the sign language interpreters who are not hearing impaired in their WhatsApp group. Interpreters are often included in their group, as they accept their deaf culture and help in interpreting sign language. I am into their WhatsApp group as an ISL interpreter and they consider me as a close friend. You know, just as birds of the same feather come together as one flock, the Deaf Community is using sign language to communicate. For others it can happen that once they realise that a hearing person has entered their group, they could throw him/her out. They do not accept them easily as hearing persons do not understand their culture. It is the same in other social media groups too. It is not social media as such if you want to call it so in the true sense of the term. However, there is lots of learning that is taking place in the WhatsApp group. That is what I would say after my research. It can be better used as a platform by teachers and professionals for teaching purposes. But it is now underutilised as such. This is one thing that I am looking forward to and would like to share in my research on WhatsApp as a social media. I have also found, in my research, that there is no particular time of the day for using WhatsApp among deaf persons. They text or send videos in the WhatsApp group even in the middle of the night. There is also no particular day of the week which they favour for messaging, except those of the Deaf Community group, which meet on the weekend in their centre and they send maximum messages on the weekend. There is also no particular day in the week in which they send maximum messages in the WhatsApp group. This is what I have found in the research on WhatsApp group usage of Deaf Community using *Whatsanalyser*, an online tool for social media research. But WhatsApp provides only six months data for analysis of a group. The rest of the data are not saved. We should have a bigger data on WhatsApp groups, to come to understand and get concrete evidence that is more reliable.

*Q:* Do the hearing impaired and speech impaired use WhatsApp in a similar manner?

*A:* No. Hearing impaired use it. I don't know about the speech impaired group, and what is the level of their speech impairment, and how they use WhatsApp. Most of the deaf use ISL to communicate. They also use texting in the WhatsApp group. But their textual language is not perfect at times in terms of grammar or syntax. But they do use text messages to communicate through WhatsApp than speech. But it is significant to note that they use visuals more, in addition to signed videos, they send smileys, visuals to communicate. In fact, my research depicted that the Deaf Community rely on visuals which are pushed in more than text in their communication, using WhatsApp through the use of sign language which is a visual language.

*Q:* The Deaf Community use WhatsApp for video calling, right?

*A:* Yes, definitely they [deaf persons] use it for video calling. Earlier they used to use Skype or IMO for video calling, as the facility was not provided on WhatsApp.

*Q:* Would you say that WhatsApp is making their isolation worse as a group? You said that the Deaf Community were mostly only admitting those with hearing impairment in the group. So, do you think that WhatsApp is leading to more isolation or is it an integrating force?

*A:* Integration, I personally feel is doubtful. From what I have seen among the Deaf Community using WhatsApp, integration is not promoted by WhatsApp group usage. Of course, this is even true of hearing groups on WhatsApp platform. My personal experience was that I was added to a WhatsApp group of the Deaf Community on request for purposes of my research. However, they took me out of the group as soon as my research was over. I had informed them that I was doing short ethnographic research to find out the patterns of communication and modalities used for communication in their group and I was part of it for six months before they closed the group to me. In the duration I was with them, I realised they were questioning some of the ideologies of the hearing world too. Topics discussed in the group also included the spoken language, cochlear implants etc. They usually do not want these discussions to go out of their group. They are not looking to integrate with society as such, they mostly would prefer to be with their groups of the Deaf Community on WhatsApp. I have a small example on which to draw these conclusions. There is a small parish community of the deaf in Bandra (Mumbai) who have an exclusive group for themselves on WhatsApp which has no hearing person in it. They have Mass separately and meet every Sunday to fulfil their spiritual needs. They go for picnics, hold exhibitions of products they make, all in a separate group. This is a wonderful example to illustrate that integration is not really

supported by WhatsApp. However, they do text one-on-one with hearing persons, they even directly ask me certain things, mostly information and education-related queries, sometimes even via sign video that I do send when I have time.

*Q:* We also want to understand how the visually impaired are using WhatsApp.

*A:* Blind persons send audio messages on WhatsApp. I wanted to share one thing that came up in my research which is somewhat surprising. The Deaf Community does not like forwarding subtitled sign videos on WhatsApp. Some of the sign videos that have gone viral do have subtitles. But the deaf do not forward them in the WhatsApp group. They are not ready to use it, or maybe not able to take in or understand the text language for communicating. This is a small finding but requires a bigger study to understand the phenomenon. I think that hearing children will find it difficult to learn sign language unless there is captioning or subtitling of the sign video with text on WhatsApp. I had asked CDAC Pune to initiate such work for the benefit for the deaf and hearing community. I am proposing a big project to the Ministry of Electronics and Information Technology, Government of India (Meity) for inclusive technology to initiate work in the direction of captioning and subtitling of sign videos in Indian languages online. This will enable the hearing world to learn the sign language easily. This online captioning and subtitling facility exists in the Western world in the form of C-Print[2] and CART.[3] But there is no technology still in our country for online captioning or subtitling in Indian languages. This technology application will increase literacy in various Indian languages even among the persons with and without hearing.

### *Case Study 3: Motor Disabilities*

#### *Background*

Samuel Mani and Meenu Mani are both confined to wheelchairs and suffer from motor disabilities. They are disability activists and head an organisation they have named *Yes We Can*. In a joint interview with the authors in 2018, they talk about the various issues they are grappling with and how WhatsApp has helped them in their quest for networking with other people with motor disabilities and well-wishers. Their organisation works with people with various levels of disability – some with speech issues, some with movement, even intellectual disabilities. Though they are struggling for funds, they organise monthly meetings where those who can come on their own, come in; for those who cannot, volunteers are sent to their homes to get them to the venue. They do not have their own website; they do have a

Facebook page with the same name where they put up details of their events and pictures. In Samuel's words, "as far as the social media is concerned, we are using it as WhatsApp and we are using the Google key board very often". According to him, they were previously using voice notes on WhatsApp but "speech to text is now working more efficiently". As he explains, speech to text is more useful "especially for a group of people with low, hand function, like I have, and many of our members have" (S. Mani & M. Mani, personal communication, 30.8.18).

Some excerpts from the interview:

*Q:* Do you have groups on WhatsApp?

*A:* Samuel Mani: Yes, we have groups. We also do, like typing work … sometimes we type a letter on WhatsApp and after we send it to the group and then we cut and copy it. Because Windows speech-to-text is not as efficient.

*Q:* Tell us about your WhatsApp groups.

*A:* Samuel and Meenu: We have 40–50 members, all from Delhi. We meet at a school, St. Mary's, which has graciously given us a room. We mostly share messages about personal experiences, talk about what we discussed in meetings. We have both volunteers and members on the group and we try to keep in touch with members who can't come out very often (as they are not mobile), some of them are staying on the first and second floors and it is difficult for them to be brought out. We also share if somebody has some problem.

*Q:* How about videos on your groups?

*A:* Samuel and Meenu: Video messages we don't send, even video calls are very rare, because if we make a video call, we need to have movements and we need to be stable and hold the phone camera. Introducing a volunteer Ravi, the couple tell us he conducts theatre workshops for their organisation. In these workshops, "through theatre we try to build up their personality, confidence, through exercise and other activities". It works as therapy, as sometimes people have too many issues. If they can't express it in their personal environment, then they do (engage in) drama. There, they can express their feelings, their stories. Videos of members who have done either well or who need support are uploaded mostly on Facebook.

*Q:* Give us an example of using WhatsApp for the benefit of those with disability.

*A:* Samuel: I think WhatsApp helps remove the idea of disability from a person. It makes her a normal person. Facebook is also a place where we share photographs. In WhatsApp you can control your photographs. I will give you an example. We have a member; he doesn't have control over his body. He is always moving, so for him using a PC is more

difficult than the mobile. On the mobile he usually uses WhatsApp, not Facebook as much.

*Q:* How you are using WhatsApp to send messages to different disabled groups?

*Samuel and Meenu:* It depends on the different disabilities. Like for my visually impaired friend, I have to record the entire message and send; then there is another hearing-impaired friend for whom I have to video call so that she can lip read (I don't know sign language and I can't use my hands well). Even if you have a person with low vision then you have to think that when we are making a poster, we should use high contrast colours, have bigger font size, especially for the event.

*Q:* Which language do you prefer to communicate in?

*Meenu:* Most of our members prefer Hindi or a mix of English and Hindi.

*Q:* Do you also use motivational messages on the group?

*Meenu:* We do. Because I am unable to type much, most of my messages are recordings.

*Q:* Are your groups also plagued with Good Morning forwards?

*Meenu:* Oh, I have told everyone to not send *Good Morning* and *Good Night* messages. Previously people used to put them a lot. So, I have a special group which is common for all "Yes We Can" members where you can only talk about disability related issues. Then there is another where you can talk about matters of the heart. Then there is a Birthday and Anniversary group where we only wish on those occasions.

*Q:* Do you not have disagreements on WhatsApp groups?

*Meenu:* Disagreements happen in families also. When families are in one place, people with different ways of thinking will post their views and if others don't like their thinking, then there will be fights.

*Q:* Your WhatsApp groups have only differently abled members or are others such as able-bodied family members also part of them?

*Samuel and Meenu:* We have different kinds of groups – some comprise only members, some only volunteers, some have both members and volunteers. We have a separate group for family. In today's selfie and photo age, wherever we meet, we always click pictures and the minute we click pictures, we first put them on WhatsApp.

*Q:* Are you in touch with people outside Delhi too?

*Samuel and Meenu:* People keep approaching us for membership. We can only make them members on WhatsApp because coming from far, reaching here is very difficult (for them). Some have joined us from Gujarat.

*Q:* Do you have All India groups or groups limited to Delhi on WhatsApp?

*Samuel and Meenu:* Our All-India groups are not as strong, though we have requests from Gujarat, Bihar, Mumbai. We would like people like us to take over the movement in other areas. Even if in our name, let them work for the cause in different locations

*Q:* How many (WhatsApp) groups are you members of?

*Meenu:* We haven't counted, but there are many. In fact, yesterday I suggested that all the groups are so similar – talking about disability mostly –so, let us shut down except one, I will run it and they can facilitate the other groups. There are many groups, in Delhi and outside too. We have four groups where *Yes We Can* is a member – Disability Dialogue, Federation of People with Disability etc. There is one national group, one for Delhi and one for Haryana, three groups in all. Then we have NPRD group, we are affiliated to it and I'm a member. That's the National Platform for Rights for People with Disability. There is a branch called "Dilli ViklangAdhikaar Manch" (loosely translates to Delhi Handicapped Rights Platform) and I'm working with them. Also, another group for *Aadi*, that is another Drama group and Documentary group. Despite being on so many platforms, where we raise our concerns, we are not sure how successful we are in influencing people. But for instance, we train people in content writing, for blogs etc. There we explain on WhatsApp groups how to write, what to focus on. These are assignments for those with disability who find it difficult to move out of the house. So, we use WhatsApp as a platform for explaining the assignments to them. We have workshops on Skype and then once they get a general idea of how to go about it but if they have specific questions, they will not raise them on-the-spot but mostly ask them on WhatsApp

*Q:* Do you feel connecting in a group on WhatsApp made it easier for you to make your voice heard in terms of policy, better accessibility in work environment?

*Samuel and Meenu:* I don't know about policy but I know about getting your idea across to the people. Yes, we are able to send a recording or a message when we have the exact number. This is the best way of communication – it is very easy, we are able to put across what we want to say simultaneously to a large number of people, we are able to use WhatsApp much more. … I hardly use the phone any more, especially because mobile signals are weak in our house. I mostly use WhatsApp to call. WhatsApp has become essential for our life. If the Wi-Fi is working, then anyone can get messages on WhatsApp.

*Q:* Any other interesting anecdote you would like to share with us about WhatsApp? Any romances on the groups?

*Samuel and Meenu:* No romances but yes, lots of matchmaking attempts on WhatsApp. We keep getting messages about them. We tell people to look at WhatsApp and if any girl is interested, she'll get in touch (for a boy). Even if it doesn't work out, today my friends, or you can call them members, who have been confined to the same room for 18 years or more are not as lonely as before. Today they are coming out of their homes, and if not coming out of their homes, because of WhatsApp they

**FIGURE 7.2** Samuel and Meenu Mani, Founders, Yes We Can.

*Source:* Samuel and Meenu Mani

get the feeling that their friends are with them. Even if one person puts a message on the group that they are not feeling well, the entire group one by one asks him how he is. That itself makes them feel better, with so many messages coming to him. In fact, kids on our WhatsApp groups even play Antakshari (music game) there. They fix a time when everyone gathers on WhatsApp and they record their songs and keep sending.

*Q:* How about international groups? Are you part of any groups with Non-Resident Indians, NRIs?

*Samuel and Meenu:* We are in touch with those abroad on Facebook. And with at least 8–10 groups with NRIs. These do not include family groups.

### *Case Study 4: Intellectual Disabilities*

Another category of persons with disabilities (PWDs) is that of intellectual disabilities. This section of PWDs is also fairly diverse, including persons on the autism spectrum disorder, persons with learning disabilities and

other forms of challenges. Dharini Mishra, a special educator for those with Autism Spectrum Disorders, had some insights to offer regarding use of WhatsApp by children and young adults living with autism. According to her, children on the spectrum can use WhatsApp with adult supervision, either by their parents or by their teachers. WhatsApp has also been used by teachers for these children on a one-to-one basis for educational purposes. However, unsupervised use of WhatsApp is not encouraged for these children as they may have difficulty in understanding boundaries and what constitutes appropriate and inappropriate communication. Online safety is also an issue. WhatsApp groups for parents and teachers of children with autism were also found to be useful for administration of learning tasks and exchange of information (D. Mishra, personal communication, 7.9.2021).

Autism activist, Neena Wagh, who is also a caregiver, reiterates the problem of not being able to establish boundaries in communication among those living with intellectual disabilities. However, children and young adults who are on the autism spectrum are well able to use the technology but lack the discernment to understand what may be unsafe or inappropriate communication on social media (N. Wagh, personal communication, 15.9.2021).

## Conclusion

The in-depth focus groups and interviews with persons with disabilities, as well as activists and people working in that area, gave the authors important insights into the advantages of social media, more specifically WhatsApp for these communities. It has emerged as an important resource for exchanging vital information, as well as meeting the psychological needs of feeling socially connected for persons who may otherwise feel a degree of isolation. Communication in the WhatsApp groups for hearing or motor impaired persons strengthened the feeling of bonding within the community. Hearing impaired groups were reluctant to accept persons with hearing in their groups, with the exception of interpreters. Visually impaired persons used the audio and speech features of WhatsApp to exchange job-related information as well as to connect with their friends. Persons with intellectual disabilities found WhatsApp useful for educational tasks, information exchange and staying connected. However, activists working in this area reiterated safety issues online for unsupervised use of social media among the persons with intellectual disabilities.

Antara Telang (2018), an Indian woman living with a leg amputation, derived a lot of benefit from being a member of a WhatsApp group for Indian women amputees called "Wonder Women". She was initially sceptical about being added to the WhatsApp group for women living with leg amputations, but she found it very useful. In her words:

> Most of all, I hadn't realised how much it helped to just be able to talk to a bunch of people who get, and I mean really really get, what you're going through. Groups like this help us navigate the everyday world, which is rife with ableism and sexism, with unwavering support and a pinch of humour. Wonder Women *zindabad*.

The insights that emerged across different kinds of disabled communities is that WhatsApp is an important tool for staying connected, creating awareness, connecting with likeminded people and exchanging information and entertainment. Most of the users of WhatsApp who were disabled highlighted the positive aspects of the app. They felt more empowered as a result of using it and it helped to reduce some of the specific problems associated with their disability.

For activists, organising in WhatsApp groups helps in creating awareness about problems and opportunities relating to disabled persons, as well as applicable laws and policy measures. WhatsApp has helped disability activists to connect with persons with disabilities at both city and national levels. Content relating to these groups is also originating abroad in the case of videos etc. and so helps these persons connect with an international dimension as well.

The horizontal communication encouraged by WhatsApp groups is also part of the participatory paradigm of development communication. This paradigm favours dialogic communication first theorised by Paolo Freire (2017) in his seminal work "The Pedagogy of the Oppressed" in the context of education. Since much of development-related work seeks to deliver social justice to marginalised groups, the disabled are one such major group. All communication efforts should be towards reducing the gap between the "abled" and the disabled groups. WhatsApp helps in bringing about this laudable goal.

It is interesting to note that WhatsApp has been ranked foremost among apps in India in terms of accessibility by persons with disabilities. This is according to a recent report titled "Making the Digital Ecosystem Disabled Friendly". The report evaluated popular apps along parameters such as messaging, online payments, transport, e-commerce and food delivery (Singh, 2023). The high accessibility tag given to WhatsApp was based on the Web Content Accessibility Guidelines, a global benchmark for determining to what extent a website is disabled friendly. The Covid-19 pandemic deepened the use of technology in daily lives. Thus, digital products and services need to be more inclusive and disabled friendly as technology is used for a wider range of routine activities. Digital accessibility should also be based on a rights-based approach for persons with disability. The author's research also corroborates the report's findings that PwDs have mentioned that WhatsApp is useful and vouched for its accessibility.

## Notes

1 Aadhaar is the Unique Identification numbers issued by the Government of India to all residents of the country. Similar to the Social Security Number issued in the United States.
2 More information at www.rit.edu/ntid/cprint/ (accessed on October 2, 2021). Text to speech (captioning technology) developed by the Rochester Institute of Technology.
3 Communication Access Realtime Translation, CART or instant speech to text using technology. More information at www.nad.org/resources/technology/captioning-for-access/communication-access-realtime-translation/ (accessed Oct 2, 2021).

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# 8

# PROFESSIONALS AND MESSAGING

## Fatigue or Administrative Ease?

*As the second wave of the pandemic was reaching its peak in India in April–May 2021, Dr Manmohan Singh was glued to his phone in Haridwar trying to arrange resources for stricken families. A grouping of 60 such doctors had formed a WhatsApp group in April 2021 named "Oxygen of Life" (Henry, 2021) to aid people who needed help. And there were so many of them. The group was inundated with SOS requests for medical advice, oxygen, medication, sometimes equipment too. With a lockdown declared in Delhi and other states, Covid-19 patients and their families were in a bind. This group of doctors came as a lifeline for many patients who were given timely advice to get admitted or with help for getting equipment through it. When a message came on the WhatsApp group asking if it was possible to arrange for a BiPAP machine, a resident doctor unhesitatingly responded that she had a CPAP machine at home and could spare it (the CPAP machine is also used for clearing airways). Another senior resident in the group had helped the same resident by adjusting her mother's medication. Some 80–90 messages poured in every day, some from doctors' own relatives. When one doctor was in quarantine and needed urgent medication for his uncle, the group came to his rescue. Manmohan Singh spent at least 4 hours on the group every night and said there were others spending over 8 hours a day on the group. Scores of people were helped by this small initiative.*

For medical professionals, the flip side of using WhatsApp has been the constant inundation by patients via phone calls and WhatsApp. A young Covid-19 doctor, while speaking to *The Times of India*, talks about the guilt they

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carry if a tragedy occurred because they did not respond in time to any message for help (Nambudiri, 2021). The same article says a tweet by a doctor asking for people to respect his time with his family found a lot of response as personal space was getting eroded.

WhatsApp messenger's presence in our lives has blurred so many boundaries – the professional intrudes into the personal and the personal leaks into the professional. It is relentless, it is on, 24 × 7. Talking to office colleagues about office work turns into giving out personal details which otherwise would never have been shared. The traditional separation between office and home has got eroded, and so has the distinction between working hours and leisure time. Though many professionals insist that they cannot do without WhatsApp for office work, the fact of the matter is that there are an equal number who believe this kind of 24 × 7 intrusion of office into your home is leading to stress, insomnia and relationship issues.

In a study as far back as 2013, it was found that WhatsApp could prove to be quite beneficial for educational purposes. Teachers were more comfortable using email, while students "felt at home" in Facebook groups; however, WhatsApp messenger was one app both were happy to use (Bouhnik & Deshen, 2014). Though the app was felt to give a lot of advantages, teachers opined that with WhatsApp they were required to invest time "beyond their regular work hours, in addition to being swamped with messages". Another study (Attalla et al., 2020), which was conducted by the Management and Science University (MSU), Malaysia, in 2020, concluded that for effective communication using WhatsApp in organisations, not only was specification of rules beforehand as well as training useful, even working hours needed to be specified.

A UK-based analyst firm's, CCS Insights, study of over 670 employees in the United States and Europe in 2018 had indicated that WhatsApp had emerged as the most popular mobile app in the workplace. But the author of the study, Nick McQuire says, "WhatsApp has encryption mechanisms, but there's not enough control, governance, visibility and reassurances that enterprises need". Worries over data protection when shared with employees who leave or of privacy when used in the medical context continue to prevail. The other side of the coin, however, was experienced by Maersk, a Danish shipping firm, when it's entire data reserves were hit by a cyberattack and all that was remaining was what was there in employees' phones, thanks to WhatsApp (Finnegan, 2018).

### Why WhatsApp for Office

There are many advantages of using WhatsApp for work, the first being that it is already being used for communication at work. The easy user interface, the facility to create groups, easy sharing of media etc. are some reasons

favoured by companies to use WhatsApp for internal and external communication. Anderson's "imagined communities" could explain to a large extent why groups on WhatsApp are successful. Though Anderson had used this phrase to explain the idea of a nation, it could well be applied to social messaging platforms like WhatsApp where people form virtual groups with others who have a common characteristic (Anderson, 1983).

In the absence of recourse to digital methods for extraction of information from WhatsApp through accessing platforms, application programming interfaces (API) or other methods, given its end-to-end encryption, the authors relied on primary data collection by interviewing a number of people from different sectors, as well as a survey. In addition, secondary data were also utilised, such as research reports, journal articles and books.

The persons interviewed were selected based on convenience. Most interviews were face to face and were conducted in Delhi over a two-year period. The government sector was represented by interviewing officials at different levels of seniority from the Ministries of Railways, External Affairs, Human Resource Development, Information and Broadcasting and the Defence Services. Officials from non-government organisations and some academics were also interviewed. Some officers from the corporate sector were interviewed and a Focus Group was conducted in one corporate office.

Regarding the background of the survey, there were 205 respondents in all, selected as a convenience sample. Of these, 27 professionals and entrepreneurs also responded to the survey questionnaire, of whom 14 were men and 13 were women. Except for three, all of them said WhatsApp was their most preferred platform (88%). One did not give any response. Seventy-eight percent (21) said their experience with WhatsApp for professional work was good, one even said it had been wonderful. Asked if overall the app had made life better for them professionally, 74% (20) were quite certain that it had indeed. Two said they were not using WhatsApp for professional interactions, three were of the opinion that there had not been much change, while one was emphatic that professional life had been negatively impacted with WhatsApp; one entrepreneur said it had helped reduce the Business-to-Consumer, B2C communication gap.

One thing that was common to all those interviewed across the government, non-government and corporate sectors was that they believed that for coordination and clarity of communication across hierarchies, one cannot beat an instrument like WhatsApp. In fact, Prakash (name changed),, a senior civil servant, goes so far as to say that "Government which normally stands accused of delays and dithering finds some kind of redemption in usage of media like WhatsApp" ({Prakash (name changed), personal communication, 26.8.2018).

As former Divisional Railway Manager (DRM), Howrah, Dr Badri Narayan says in an interview to the authors (B. Narayan, Personal

communication, 20.12.2017): "In an industry like the railways, there's constant coordination requirements, between many departments and communication across departments". He explains this further:

> Ours is an industry, workwise, which has heavy coordination requirements. Because for the simple run of a train, 7–8 departments are involved. So, if there's a crisis or anything that requires things beyond the routine, you need so many people to coordinate. Therefore, as a coordination tool it is very, very effective. It reduces your burden of having to communicate separately or teleconference – if you wanted to talk to four people and I've worked continuously through the evening, night, any time, to tell four people instructions you gave it here so that all of them got it, otherwise you make four calls. And then one guy would say one thing, that response wouldn't be available with the other guy, so all of that you know. So, the advantages of a teleconference, in some sense, came into this medium.

In fact, Badri concedes that WhatsApp was often their first means of communication on an issue.

The view of Anand (name changed), a senior bureaucrat in the Ministry of External Affairs, was similar. He said, "I cannot do without WhatsApp" while speaking to the authors (Anand, personal communication, 24.1.2018). He said his reason for preferring WhatsApp as a means of communication within his department is because he has no doubt his email is compromised. He feels that "WhatsApp is a very secure media". In an interview in January 2018, Anand (name changed) said, if his department had to only go through their own channels of corresponding, then "everything would come to a standstill" as it is very complicated.

> So only when any highly sensitive matters are being corresponded, highly classified material, then they are used. But when you are doing routine, day-to-day stuff and you still don't want somebody eavesdropping, I think it's very important that we make use of social media. I for one cannot survive without WhatsApp,

he says.

Even Brig. Tripathi (name changed) (Tripathi, personal communication, 6.1. 2020), of the Indian Army, concedes that WhatsApp is "an excellent medium for … coordinating and getting things done". However, in view of the directive from the Directorate General of Military Operations asking officers and soldiers of the Indian Army to quit groups where the identity of any user is not known, the use of the app has been "discouraged". He says they have gone back to the old methods of addressing their men at "fall-in"

where "orders are passed directly and then an update is taken on a regular basis … what was done in erstwhile days". He believes though that

> when we had WhatsApp groups, then youngsters or juniors did not take the initiative. If they had a doubt, they would immediately revert back to you. Whereas now, it is of the days of yore, you pass something, it was directive style of command. You give your directions and tell them an end task. And then they are on their own, they apply themselves and they are able to generate out-of-the-box solutions to issues on a number of occasions.

Heading the Society for Promotion of Youth and Masses (SPYM), a non-governmental organisation (NGO) that deals with drug abuse prevention and recovery, Dr Rajesh Kumar (R. Kumar, personal communication, 9.2.2018) was of the opinion that WhatsApp has been a very useful tool for them in four to five ways. He says:

> We don't have to individually contact people, at the same time we don't need to put everyone in the same group, we have different groups for different areas; for example, we have a separate group for homeless shelters. Also, now most people have taken Jio,[1] so if your mobile (network) is off but data is on, then one can receive messages or calls. Thanks to Jio, thanks to WhatsApp, we can contact people even when there are mobile network issues. So, WhatsApp is a very useful and a very positive development for the NGO sector and it's cheap. Other ways in which it is useful is for sending circulars, receiving photographs of programmes, in real time. For example, this morning we had a training programme for Sub-Inspectors, and already the entire office knows.

Even Vipul Upadhyaya (V. Upadhyaya, personal communication, 17.11.2017), National Ops Head at the Broadband vertical of Siti Telecom, said:

> Approximately 90% of our conversation internally happens on WhatsApp. Some believe it's 100%. Whatever the perceived percentage, WhatsApp is the top tool for internal communication. … We begin our mornings with a look at our office group and end the day the same way.

In fact,

> One "rebel" who is trying to not be on WhatsApp is there, but he has been told that he has to be on the office group/s. After the rebel was told to be on the WhatsApp group, the next day he went and bought a smartphone.

As Vipul says, "My communications do not flow to anyone who is not on WhatsApp".

The authors got the same sense of WhatsApp becoming indispensable in office situations across the board from professionals, whether they were government officials or from the non-government sector. As a faculty member from the prestigious Indian Institute of Technology, Delhi, Vigneswara Ilavarasan said in an interview (V. Ilavarasan, personal communication, 10.1.2018):

> My life has become relatively much better because of WhatsApp … so now I'm not really dependent on telecom service networks anymore. Unlike telecom service networks where accessibility is a little bit of a problem in many places, Wi-Fi is freely available for people so I'm able to communicate with a lot more people.

For those organisations having offices abroad, WhatsApp has come as a brilliant tool to communicate. Siti Telecom employees give an example of how it helps:

> We do not have branch offices abroad but we do have vendors. For those in China, we have to download WeChat to communicate or use email. But sometimes, pictures can help communicate, through WhatsApp or WeChat, much better than English, as vendors abroad do not speak good English. For instance, Saurabh (Head, Marketing) was not able to follow what a vendor in China was talking about; he asked him to send a picture of the part he was referring to and then was able to understand the problem.

Even internally, WhatsApp's easy picture/audio/video-sharing properties are very useful. As Vipul Upadhyaya explains:

> For FSEs (Field Sales Executives), their attendance is marked with a selfie posted on the WhatsApp group. Also, training for these executives is done through videos sent via WhatsApp. … The sales figures which are shared every day are now much easier to transmit, with a photograph of the Excel sheet shared with group heads. These used to be shared as big text messages via SMS in the olden days.

Dr Rajesh Kumar, Executive Director, SPYM, also uses this innovative approach in his organisation. He says:

> Some of our field offices have only one or two persons. We found a new feature on the internet, "stamping". If you download the stamp, when

> you click a photo, the time and date get stamped on it. And the place you can see in the background. So, the field staff have to click a photo and share with us. Biometric attendance devices are expensive, so for attendance purposes, this works very well for us. We have told the field staff that the day we don't get these stamped photos from you, we will presume you have not come. We have deducted 6 days' salary for one such staff member. He called me this morning and said "Sir, my salary has been deducted". I told him that if your mobile was not functioning, you could have sent me the photo later in the day or the next day with the stamp. If it was on the same day, we would have considered it … this is much better than biometric because you can't tamper with this.

He adds that "Sharing photograph, communicating with staff, sending something – important information, some circulars, attendance, calling – are all important features with WhatsApp. Communicating from abroad also works out very cheap. And quality of WhatsApp abroad is also very good".

Vigneswara Ilavarasan indicated that WhatsApp has also been a very useful tool in teaching. In his interview to the authors, he says, "On the professional front, we have a group – faculty groups … (where) interactions are relatively very less but sometimes useful information is shared across". Aside from this, he has a group of around 15 students along with a colleague. These are MBA students working on projects and PhD students. In his words,

> there a lot of discussions only related to professional stuff happen. I post information related to call for special issues or new articles and no jokes in that, (it) is only purely professional stuff – when we're going to have a meeting, what happened in the meeting, when is the deadline – all this information goes, there's a constant interaction there.

Then there is one more group which is related to his teaching assistants from three courses where he teaches. He is not part of the students' groups though; he passes information to the class representative (CR) and the student conveys it in the class group.

He is also a part of one more WhatsApp group which is related to ICTs in agriculture, formed basically by (small) farmers who are using technology in agriculture, (who) formed a group on Facebook. Prof Vignesh sent his number to join the group where he is merely an observer, but he got to know about government schemes and their reaction to those. This, he says, could prove useful to him for future research in the area.

He presumes his students are mostly using WhatsApp groups to communicate about studies, but he cannot be certain about that. Some of his students have indicated that some faculty members do not use WhatsApp to communicate with students and so prefer email or personal meetings.

However, he himself has no such issues, so long as the language used by his students remains formal and no forwarded messages are included.

### Is WhatsApp Official?

As far as the corporate or NGO sector is concerned, most instructions received on WhatsApp are treated as official, if coming from a superior. However, if there is any policy involvement or a matter that is of greater significance than routine, the WhatsApp message is complied with and then reiterated via official email to obtain post-facto approval from bosses.

A similar pattern is observed in the government sector, where instructions on day-to-day coordination received on WhatsApp are complied with and those having more than routine significance are confirmed via official mail or even better, on file.

Interestingly, the Ministry of Electronics and Information Technology, Government of India, came up with a set of draft guidelines on using WhatsApp for official purposes. Named the "*Guidelines for Use of WhatsApp in Government/ Government Entities*", version 0.3 was circulated as draft on September 14, 2017. However, the approved guidelines are not to be found on the ministry's website. The guidelines discuss the advantages of WhatsApp, along with its limitations and assess risks associated with use of any smartphone. It ends with a set of do's and don'ts for usage of WhatsApp in government offices.

The guidelines are aimed at various government departments for official use of WhatsApp. These could also apply to similar instant chat platforms. Absence of audit trail, full access to data on mobile, inability to log out from a session, US legal process requirements of WhatsApp to the US government, data sharing between Facebook and WhatsApp, Backup not being encrypted, controversy over data preservation, encrypted messaging etc, are some of the limitations according to the guidelines. Among the risks associated with using any mobile phone are listed threat agents, loss potential, losing classified data to malicious code. The guidelines conclude with the following recommendation:

WhatsApp may be used as

1. Informal/ public communication medium for sharing any information which is meant for public or is already in public domain
2. As a channel to receive communication, feedback from public.

WhatsApp should not be used for

1. WhatsApp should not be used for sharing or sending official documents or records which in normal course are not to be shared with public.[2]

However, the guidelines have not yet been officially confirmed but in practical usage, most government offices have gone ahead and adopted it for official use.

### Problems of WhatsApp for Office Use

The problem arises with the quantum of messaging coming in. In fact, when, the senior government officer dealing with the press, Tanmay's (name changed) (Tanmay, personal communication, 28.6.2019) phone needed repairs and was taken away for two days, he remarked, "It's as though the rain has stopped!" The drip, drip, drip of constant messaging on WhatsApp and the sudden deluge of information in the event of some official event is incessant, he says. He works for the Government of India, an organisation that, in the public eye, is staffed with indolent workers who lazily sip *chai* (tea) and move files at a snail's pace. But with WhatsApp, the pace of work has got compressed to the extent that everything needs to be done as of yesterday. He says:

> Saturdays–Sundays also it's as though you're in a virtual office room, waiting for official orders to come and reply. So, in a society like India, it's like, it doesn't matter if it is Saturday or it's a holiday, your bosses, expect you … and your subordinates also keep sending you messages asking for instructions. … So, they expect you to give them a reply whether it's a Saturday or Sunday. Sometimes your subordinates wait for you to respond and if you don't respond then they call up. Or even worse, sometimes they don't call up, they just go ahead and do what they wanted to do and then later on they say I asked you for guidance but you didn't give. So, this takes a terrible mental toll in terms of pressure. So, you may be washing clothes or you might be driving and you might be doing hundred other things but you are still looking at your WhatsApp to see if any official business is there which needs to be responded to urgently.

So many of his colleagues bemoan their fate of having joined the government at a time when expectation of delivery of work is immediate, and there is not enough support – money or staff-wise. Many blame the entry of social media into their workplace for the change. Besides, Tanmay says:

> [I]t does lead to quarrels once in a while when you object to something that they have put and they object to something you have put. So, then you have these WhatsApp fights – somebody walking out and all that. Then it ruins your mood for rest of the day.

Vipul from the corporate sector was weary of the fact that on average he received about 30 messages an hour at peak time (which most of his

colleagues agreed were the morning and evening hours, say 7–9 in the morning and the same in the evening), the virtual textual flood causing him to miss important personal messages too. As he says:

> Messages are too numerous for us to keep track of. We pay particular attention to office communication, but while we are checking for official messages, friends and family can see we are online and are miffed that we have not checked their messages.

In a Focus Group discussion with employees of the Broadband division of Siti Telecom, one person said his wife posts updates from their child's day like her dancing at home and gets annoyed when she finds the husband has not seen it on WhatsApp. This "mixing of professional and personal lives" with "no separation" was leading to stress. Among the quotes of other functionaries in

**FIGURE 8.1** Focus Group Discussion with Employees of a Corporate Firm

Siti Telecom were "Loss of peace of mind", leading to very high stress levels; "More difficult to ignore"; "We are distracted all the time". Others said their families complained often that "you are always on the phone (that is, on WhatsApp)". They also felt that long messages about inventory listings and attendance selfies needed a lot of concentration to go through, taking time away from other things. On the other hand, some employees believed they had "got used to the noise".

Badri Narayan explained the problem with WhatsApp in a professional setting thus:

> Well, sometimes you're not sure in a group whether a document that has been uploaded is authentic… sometimes there is misinformation. Is this the real one? There is no signature or anything on it. There was a programme that was sent, is this the last programme that was sent, you know things like that, whereas in other communication, you have ways of authenticating. So, sometimes there is misinformation even on official (groups) … so some draft has been typed, somebody has taken a photograph and sent it to you, saying 'Sir this is the latest thing on that' and then you realise that's not true. … Because it's available everywhere, people tend to be in a hurry to (share).

The instant nature of the messaging platform means people, anxious to have a scoop, share information that could be wrong or inappropriate.

Amita (name changed), senior faculty at a government institute in New Delhi, shared similar concerns However, she believed her experience with WhatsApp was "not that uncomplicated." {Amita (name changed), Personal communication, 10.1.2018

in an interview to the authors, she said that

> institutionally I had a very bad experience with WhatsApp, because … I don't want to know what the students are talking but there are faculty members who would like to know and understand what the students are talking (about) and they took printouts of students' discussions and actually pulled up a number of students. … Along with them a number of teachers also jumped into the entire game, (it) become a very nasty thing (situation). When I was (the) Head of the Department, I used to talk to the Class Representative (CR) only and (the) CR distributed (the) (information). I don't want (to know), even if they are telling bad things about me, I don't need to know because see, this is also a stress buster (for the students). If you are unhappy with your faculty, it is okay to talk among yourselves. Why should I know, until and unless I have done something very seriously wrong? Misuse of WhatsApp had happened in

> our Institute, faculty had played politics with WhatsApp. Some people resist, but because some will do (get involved in student groups), nastiness will happen.

As Prakash (name changed) says, another problem with WhatsApp is that it tends to "disturb hierarchies".

> When it comes to the hierarchical organisation, this (WhatsApp groups) is a bit of a problem because the moment you have everybody, you know, starting to voice their opinion freely and you know, frankly, many a times it leads to very complicated situations,

he says{Prakash (name changed), Personal communication, 26.8.2018}. This sentiment was echoed by a number of government officers we talked to. Tanmay (name changed) had some advice on the matter – he says:

> It cuts both ways, because then you are also able to communicate easily to your superior and vice versa but, yes, the flow of information is more in case of WhatsApp groups than would be in a normal office. And because of that there are a lot of informal rules, which have come into place. One is that, if you have a problem, first you tell them (officers concerned) what the problem is exactly. But don't put it directly on a WhatsApp office group where everybody can see it, because then it looks like public criticism of that person. Then another one is that to the extent possible, do not put non-office related things in office groups. Sometimes somebody do put, so, then others are uncomfortable with that. Another problem of course is that people don't like to be asked to do things on WhatsApp groups especially from a superior officer to the junior office because then others can see that he is receiving orders. Some of them like to receive the orders privately. So these problems are there which are basically antithetical to the hierarchical structure and how orders and information flow from below to above.

But one can also use the same to get things done, says Tanmay (name changed). For instance:

> There is some office problem, water is not there or internet is not there and you have been telling your administration that this needs to be urgently addressed and you find that they are not doing it, so then you put it in a WhatsApp group which has hundred people, that there is no water for me to make tea or whatever. So, then such a pressure (is created) on administration because all those hundred people are now

> aware that there is no water in "X" place. So pressure gets transferred to them.

As mentioned earlier, social media, particularly social messaging, has accelerated the collapse of hierarchies. If the introduction of the mobile phones led to a collapse of hierarchies, the introduction of WhatsApp has wrought even more damage to the hierarchical structure of organisations (Jeffrey & Doron, 2013).

When asked if he finds WhatsApp problematic in maintaining hierarchies in an organisation like the army, where much depends on following orders, Brig. Tripathi (name changed) admits that "shortcutting" does happen and creates problems. However, he says:

> If you jump the hierarchy, you are aware of what are the drawbacks of not following a hierarchical system in getting a job done. Then people at intermediate levels feel left out and then they show lack of initiative and lack of concern, "Agar yeh hi karna tha to aap sahab se hi poonch lo, hum se kya poonch rahe ho" (translation: "If you wanted to do it like this, then you ask sir himself, why are you asking me?").

Shortcutting is "definitely" discouraged and

> [i]f somebody jumps the queue and queries directly then he is told to follow the channel. Until and unless it is something very, very dire, then, of course, you are available 24 × 7 for resolving any dire situation but normal run-of-the-mill situations that person is expected to perform on his own.

### Office Groupings: The Structure

Badri Narayan explained how the professional group he was incharge of functioned when he was DRM, Howrah. He says:

> Basically, there's a lot of coordination requirements. … So we had one group which had all the departmental heads, me and my second in command, all of us were in that group. So, any issue that needed to be informed to maybe more than two, was put on that; even if it was a bilateral issue it was put on that if it was important because it could have implications for others. Any other follow up action that needed to be taken was then followed up on that. And the rule was you couldn't put any pictures, any forwards, any good mornings, any pictures of *Bhagwan ji* (gods) and all that, no such stuff, no jokes, no forwards, only official

> stuff. They stuck to that … So it was a very useful way of not having to call anyone. You suddenly got information that tomorrow GM (General Manager) is inspecting this line, so you put it on that and others would talk and then sometimes I had to follow it up in a voice communication. Otherwise, that was enough information for everyone to rally around all the resources for whatever was required.

Being the senior-most allowed him to set the rules for the groups, though he was not formally the group admin – that role was reserved for the immediate junior who carried out his instructions in administering the group. Asked if there were other WhatsApp groups of which he was a part, he said:

> There was another one with the headquarters (HQ). HQ had a similar group for the General Manager and the Principal Heads of Department to which the DRMs were also a part of it. so there also there used to be some discussions, some of these official things.

A similar pattern is seen across the board, as the working in an organisation basically is hierarchy-driven. So, a group of people would form part of a WhatsApp group, with the person heading it being in a group of those working under him/her. That would ensure clear communication down the chain of command. At the same time, the person incharge would have a group with his peers, where the communication would be lateral. The same office peer group could also turn into a more informal, relaxed discussion forum where those in positions of authority could talk without being as conscious of consequences. But the hierarchical groups have a property worth remarking on – the people below would have a peer group of their own where they would feel confident venting about the group head, who was not part of it. Badri gave the example of

> the Malaysian stand-up comic (Jason Leong) who talks of how, if any of you think you don't have this in your office, then it means you are the boss that they all dislike. … Then there's always the idiot who'll curse the boss in the wrong group.

Jason Leong's comic act about the use of WhatsApp in offices published on YouTube in October 2017 had got 236,045 views as of July 18, 2018. Though the humour is centred around Malaysia, the same could as easily apply to India.[3] The popularity of this comic act on WhatsApp in offices as evidenced by its echoes in popular culture shows how it resonates with people.

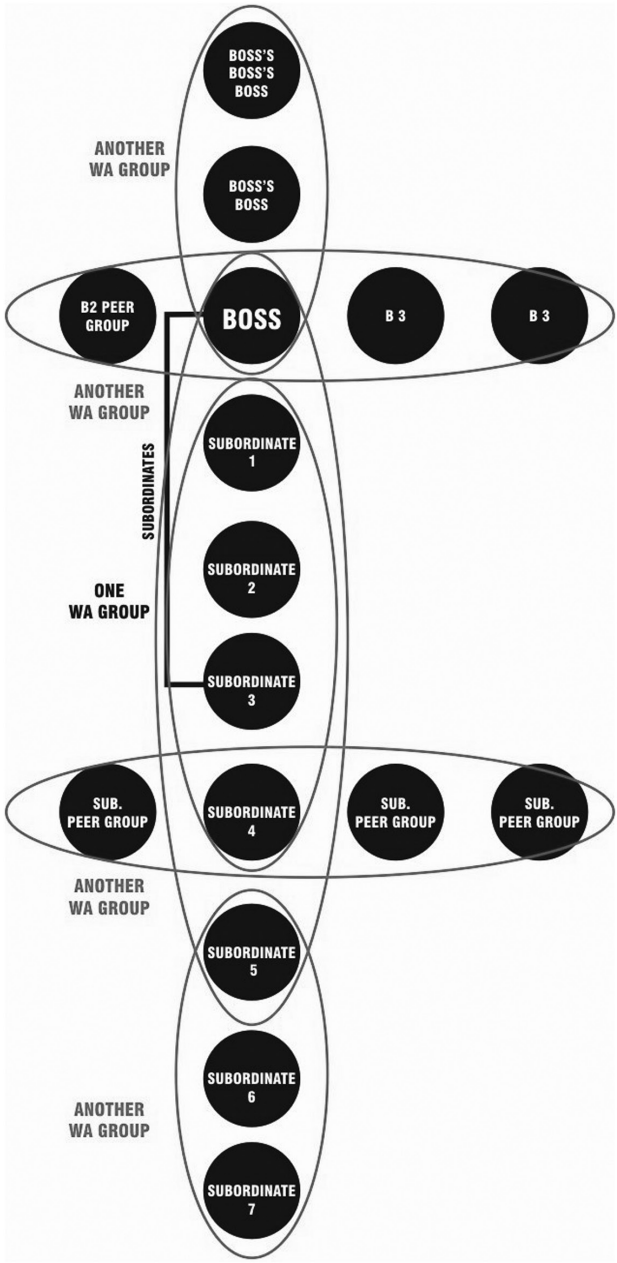


**FIGURE 8.2** A Diagrammatic Representation of Various WhatsApp Groups in Offices.

*Source:* Authors' diagram, executed by Rina Upadhyaya

The number of professional groups an individual was part of varied between 6 and 9 in most settings and it was rare to find those who had groups with more than 25–30 members. However, one professional group that cut across organisations, a group of academics in the field of media, named Media Educators, was full to capacity with 256 members and had to request those not directly in academics to leave the group so that professionals from the area could be accommodated. A group named NWMI (Network of Women in Media, India), comprising those in the field of media – journalists, freelancers, educators etc. – shifted to a similar app, Telegram, since they were oversubscribed on WhatsApp and could not afford to miss out on any of their members who far exceeded the limit of 256 on WhatsApp. However, in the months following the transition, NWMI

members found that the total number of members in their group on Telegram remained static at around 180, despite the option of being able to add many more. This, as a group member said, was because people did not want to download and install yet another app on their phone. Since they were using WhatsApp widely in personal and professional settings, they were checking it quite frequently. However, to look at the group on Telegram seemed a chore to most since they had only the one group there.

All professional groups that the authors were aware of had a strictly no-forwarded-messages policy, and adherence was the norm. The video call feature was often employed in internal discussions or when showcasing a new product or for other purposes, but rarely used with outside publics. But the voice call and voice note features were much in use.

The fear, of course, is also that there could be a "mole" in your office group who could be showing your messages about the boss, to the boss. Anand (name changed) (Anand, personal communication, 24.1.2018) a Joint Secretary–level officer says:

> You should be prepared for that. Actually, in a group, you shouldn't post something that you otherwise are not expected to post. For example, I wouldn't like to comment adversely on a foreign policy matter in a group that probably could leak it out. If there were 30–40 of us, I would "trust" somebody to forward it to somebody, attributing it to me. Obviously, I'm not supposed to do that.

Tanmay (name changed) also believes there are many who are uncomfortable with being on WhatsApp but are forced to be there out of necessity. He says: "So, sometimes you find many senior officers are on WhatsApp groups. They will not say anything but they keep watching what's going on. So, in a way it's like spying on what's happening".

However, this self-censorship for speaking on WhatsApp groups, especially among government officers, the question is how far does it extend? Generally speaking, officers we spoke to were wary of expressing themselves on social media, including WhatsApp, and kept away from sensitive discussions on policy issues, especially while speaking in a group. Also, there was this perception of being targeted by neighbouring countries, especially China for espionage. The Ministry of External Affairs (MEA) was using its own system called Fedora, which is Linux-based, to avoid hacking. The perception was that Chinese phones were compromised, and since even iPhones were being manufactured in China, they could not be trusted. It was not that the government was listening in to your conversations, but the dominant concern was that what you said could compromise national security. However, in other ministries, the fear of a mole and of going against the CCS (Central Civil Services) Conduct Rules was uppermost. The Civil Service Conduct Rules are a compendium of how a government officer is expected to conduct him/herself in their official capacity. They contain explicit instructions of do's and don'ts for civil servants.

Flaunting achievements in professional groups was also a big thing, according to Anand (name changed), who felt this was not a forum for that as "that's your job, you're paid for it. And others congratulating is even more unseemly".

One way of achieving work–life balance professionally, which was found advocated in several articles (Saha, 2020), was to have separate WhatsApp accounts for work and for home. This could help "switch off" from work while at home. Simple tips like avoiding texting colleagues during off hours was also advocated ("A Guide to Use", 2020).

It might be pertinent to mention that professionally associated men and women were found to be having single-gender groups wherein exchanging salacious and NSFW (Not Suitable for Work) messages with obscene or pornographic material was the norm. The authors do not have enough data to extrapolate to the general population but the interviews and anecdotes shared by various officials suggested the existence of such groups almost everywhere to assume safely that these are quite common. A senior government officer lamented that he was not able to hand his phone over to his son without fear of what he might unwittingly witness in his men-only group. Another officer spoke of an embarrassing situation when his phone accidentally started playing graphic content during a meeting when he was going through his messages! Women-only groups also had messages with lewd content, even among elderly women where no topic was taboo. So, this phenomenon appears to be spread across both genders. More research is of course needed to make sense of this phenomenon, which appears to be widespread.

### Quotes from the Survey

It has led to blurring of professional and personal life. Intrusive.

*Jahnavi (name changed), 40, Teacher, Delhi*

WhatsApp has allowed for constant availability for work and thus has blurred boundaries. Life was better without WhatsApp; used to be more professional.

*Lakshmi (name changed), 31, Teacher, Delhi*

Life is better with WhatsApp professionally as it is "excellent for its speed, quality and result".

*Dr T.C. Poornima, 55, Assistant Director, Government of India, Mysuru*

Professionally it (WhatsApp) has been good as diverse decisions are interconnected. Mamta Varma, 48, Director (Government Service), Delhi
WhatsApp helps to communicate faster for professional work but at times is too intrusive.

*Jane Namchu, 52, Additional Director General (Government Service), Kolkata*

WhatsApp is working as postman duty (*sic*), nowadays government and private officials are using for their work and quick conversation.

*G.D. Hallikeri, 49, Deputy Director (Government Service), Bengaluru*

(WhatsApp) is fun to use and very helpful for business work and office work.

*SrijithJayraj, 26, Video Editor (Government Service), Mumbai*

### Conclusion

All categories have found office communication via WhatsApp very useful. Office groups, however, are found to run best once instructions are given beforehand on how participants are expected to conduct themselves.

All those surveyed in the government were unanimous that WhatsApp was very useful as a coordination tool, through its feature allowing the formation of groups, and often their first means of communication on an issue. The factor of encryption added to its utility as people in government were not sure if their email was compromised. Constant messaging, of course, led to high levels of stress and the fear of missing out on any important

instruction. Many lamented the breaking down of hierarchies and also the added pressure for completion of tasks, with no cut-off time or respect for holidays. Misinformation caused by unnecessary hurry to share or confusion due to many documents being shared, without checking to see which is fully complete or relevant, were some problems with the usage of the app. Airing grievances without annoying those in a group was found to be a difficult art. And sending inappropriate messages or just messages to the wrong group could cause a lot of embarrassment. The fear of having a mole or a spy in an office group was also there. Most officers were wary of saying too much on WhatsApp and there were some concerns about hacking of phones or information being collected by China through Chinese-made phones. A mention was also made of the tendency to flaunt "achievements" on office groups that seemed in poor taste. Breakdown of hierarchies was a concern voiced by the armed forces personnel too. At the same time, it was mentioned that easy accessibility to help via WhatsApp had led to non-application of mind by junior officers.

In the case of professionals from the private sector, there seemed to be extensive use of WhatsApp for internal communication. The app helped them connect with vendors etc. who were living abroad, especially through pictures. For their personnel in the field, WhatsApp was used to mark their attendance via a selfie with a timestamp. Sales figures were also shared via the app. The flood of messages from office often drowned out personal messages and led to misunderstandings at home, they thought. But the stress of keeping up with the messaging and attendant tasks was taking a personal toll, they felt. One tip suggested by self-help articles was to separate the office and home WhatsApp numbers.

Non-government organisations were also found to be using WhatsApp to mark attendance of field personnel. Not only that, the app has become very useful to them as it is cheap and can be a substitute for mobile networks. Group communication has become the backbone of their internal communication, as it has for the other categories.

Teachers working in institutions of higher learning have the same praise for WhatsApp as an instrument to coordinate with students and other faculty via groups. The fact that it allows calls to be made even in the absence of a telecom network has proved very useful to maintain contact, they feel. Moles in groups, however, have led to some bad experiences for them.

A curious fact of single-gender groups for exchanging information of a salacious nature also emerged in anecdotal conversations and interviews. This needed further exploration though.

Professionals using WhatsApp have on the whole reported feeling fatigue from the sheer amount of information coming their way, both personal and professional. Though they were unanimous in saying WhatsApp is excellent for coordination within offices, the insights from research referred to

in the chapter on psychological insights reveal that excessive use can result in reduced productivity and performance, which should be guarded against. Experts have also warned against collapsing hierarchies affecting norms of behaviour as they no longer remain well-defined. With symbols of authority missing in mediated interactions, bosses and subordinates are likely to interact more as equals, leading to loss of inhibitions (Suler, 2004). The factor of disinhibition could probably explain the rise of single-gender groups born out of professional ties.

## Meet Ajeet Karn – CEO, News Buzz and WhatsApp Entrepreneur

### *Making a Living via WhatsApp*

In November 2017, the authors met a shy young man who was one of the first to get on to the bandwagon of WhatsApp for his news service aimed at "journalists, Information Officers, politicians and aspiring politicians". This niche service was born in 2009 while Ajeet was still with a news channel where he was not happy – remuneration was poor and he said they were doing things "we did not like". At that time, two of the main political parties had their briefings only an hour apart, and journalists used to miss one or the other. The idea of a reliable and quick news service was conceptualised then, but the service was formally launched in 2010 through Short Messaging Service (SMS) and Blackberry Messenger (BBM). In 2014, most consumers switched to WhatsApp as that was virtually free for messages and News Buzz started broadcasting messages to subscribers through WhatsApp too. It's a paid service that is financed through subscriptions. The USP of the service is its crispness (one or two lines) and its credibility as a carrier of "verified news" which is earned through the owner's meticulous networking and linkage within political and government circles. As he says, "I own my news". Interestingly, news confirmations also take place via WhatsApp or SMS. News Buzz is active through the day and night as and when there is a requirement. The two-people staff in Nanded are on duty 8 a.m. to 10 p.m. every day and get no holidays; Ajeet is on duty 24 × 7. Though the bulk of the subscribers are on WhatsApp now, newsmakers and officials often use feature phones that do not have Internet connectivity for secure communication; hence WhatsApp is ruled out for those clients.

When asked what prompted him to go on to WhatsApp, Ajeet says there were many reasons – the cost of messaging is almost nil and WhatsApp uses much less data than other platforms, making it easier and less expensive for users too. The broadcast feature, which allows one-to-many messaging, made distributing content very simple. Creation of groups and sharing content is also very easy on WhatsApp. Almost all government and political

spokespersons have 10–15 groups where they share content with news correspondents and others from their beat. Though BBM became freely downloadable in an effort to increase its user base, the files were very heavy, so it was not very popular.

When the service was started in July 2010, it had 20 subscribers on SMS and BBM. Seven years later, the business is self-sustaining with a base of 100 subscribers on SMS and another 400 on WhatsApp. These subscribers are located in Delhi, Andhra Pradesh/ Telangana, Maharashtra, Goa and Karnataka. Asked about his expansion plans, Ajeet said he could not really use the advertising route to remain true to his service standards of being non-partisan. Also, a number of his clients copy–paste the information sent on News Buzz directly on to their assignment details or news updates, and using logos etc. would hamper that ease of use. Word of mouth is the only method they are using for promotion and that has served the company well, maintaining the subscriber base, with marginal increase in the past two to three years. Brushing off the notion of competitors in the field, Ajeet says there is plenty of scope for a niche service like his, where journalists, officials and politicians can be reliably sure of the authenticity of the source, unlike with big media houses which have their biases. Among the various services on offer like IMP Buzz (for priority news), Regional Buzz (news from the regions), Birthday Buzz (alerts for birthdays of prominent politicians), Birthday Buzz has proved popular among politicians for obvious reasons.

Though News Buzz will soon have a website of its own and app for subscribers, there is no talk of paid advertising to attract more subscribers. Shrugging his shoulders, Ajeet says it's just too expensive to advertise on traditional media. Asked about competition from services such as *inshorts*, which gives you tailored content limited to 60 words on your phone screen, Ajeet dismisses them, saying that *inshorts* and other news providers are meant for the general consumer, whereas his service caters to a very niche market suited to the requirements of his specialised clientele. He also said there were complaints that *inshorts* "bombards" consumers with "irrelevant news". Even news organisations have apps now but they have their agenda, whereas his service is free of bias. He believes: "To those who need hardcore news, this service will always be useful". Any tie-ups with bigger media houses are also ruled out to maintain editorial control and integrity. In fact, Ajeet abandoned his plans to expand into Andhra Pradesh with Telugu content when he failed to recruit staff that were as meticulous as he is in their news gathering.

For those trying to enter this space, his advice is as follows:

> Be prepared for the long haul, have financial back up for 3–4 years and have patience for 5–7 years. Even then you might not be sure whether it will

work or not. Be also prepared to have the "same energy every day" as there is no off day for news. I work sometimes till 11 p.m. in the night. I have a year-old daughter – sometimes I just park her on my lap and keep working. If I go to watch a movie, I make it clear that "I may be physically present there, take me wherever you want, but I'll be tracking the news". This kind of niche service demands your best every day and that is only possible if this is your passion. Otherwise, you might be better off with some television channel or other media house.

Coming from Ghazipur, Uttar Pradesh, a scared and diffident person, Ajeet used to be dazzled by Delhi's Connaught Place. Now it is the same CP and Lutyens Zone, but now there are so many people who know him. This is what keeps him motivated. As he says in a voice full of emotion, "it all depends on what you want from life – maybe that people should know of you and then that you should have money. This service has given that to me".

## Notes

1 Jio telecom network came into the market in September 2017 with offerings of data at very minimal rates, disrupting the entire telecom industry in India.
2 From a copy in authors' possession.
3 Video at this link https://www.youtube.com/watch?v=msL-lsZMyQI. Retrieved July 18, 2018.

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# 9

# DOING BUSINESS, THE SOCIAL MESSAGING WAY

*In April 2020, Delhi was under total lockdown. The Covid-19 scare had pushed everybody indoors. But groceries needed to be bought. Shops were open but the risk seemed too much. Grocery store owners came up with the novel idea of sharing their WhatsApp numbers with their usual clients. If a list was sent to the store on their number, the items would be stacked and kept in a carton to the side. Customers could drive by, pay for the items ordered through mobile payments such as Paytm, PhonePe or Google Pay and collect the carton of groceries.* (Shamli (name changed), personal communication, 22.4.2020)

*It is May 2021 and Nagpur is under lockdown. Stores open from 7 a.m. to 11 a.m. in the morning and then pull down their shutters. Fresh food vendors like those supplying vegetables and meat are barely able to stock their shops every morning and the lockdown begins. No problem. Customers have their WhatsApp number. Call or text, both work for orders. Supplies are assembled customer-wise and then sent home through their delivery boys who have travel passes for essential services.* (Pratibha (name changed), personal communication, 12.5.202)

## Overview

Philip Kotler, a marketing legend, said in 2018 that though e-commerce has brought with it profound changes in the way the retail sector works, his original principles of marketing enunciated in 1967 still stand. The customer needed to be at the centre of all marketing, and the use of marketing tools in an integrated fashion still applied, he stated (Tesseras, 2018).

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Globally, e-commerce was projected to touch the US$2.5 trillion mark in 2020, with most growth predicted in Asia, with China and India being the main focus of growth, especially after the onset of the Covid-19 pandemic. Speaking at a webinar on the trends for digital marketing in 2021, DataReportal's chief analyst, Simon Kemp, said that with half a dozen social media platforms (not including WhatsApp), claiming over a billion monthly active users, marketers need to have a balanced social mix (Kemp, 2020). His suggestion is for a company to go for "fewer, bigger, better platforms". His rationale is that the overlap of users between social media platforms is so large that one needed to "be clear about the potential benefits of adding a new channel to your plan". He did, however, advocate the use of smaller, niche platforms for some targeted paid media activities. Ilja Gorelik, writing for Forbes.com, however, suggested that improving customer experience and engagement is the key to success in a pandemic-fuelled digital world. For that, marketers need to go omnichannel so that they can engage with customers on their preferred channel. She quoted studies to say that three-fourths of consumers surveyed prefer to communicate over messaging rather than through phone or email. This includes apps and chats (Gorelik, 2021).

WhatsApp being a messaging platform that is encrypted does not really figure in the discussion about e-commerce. This is where WhatsApp for Business comes in. As Nikhil Pahwa, founder Medianama, said in an interview to the authors, WhatsApp is moving towards a functionality similar to any payment app, but being a messenger platform, "WhatsApp is substantially more powerful" as has been demonstrated in the case of WeChat in China (N. Pahwa, personal communication, 8.12.17).

In their clarification about the change in their privacy policy, WhatsApp posted on their blog that the new policy updates were introduced with the idea of encouraging WhatsApp for Business and will not "expand our ability to share data with Facebook" ("Giving More Time", 2021). For those in India, this privacy policy update was to be enforced by January 2021 but more time till May 15, 2021, was given to accept the new policy. Despite the mass migration of many users to Signal, Telegram and other messaging apps, WhatsApp was firm that they were not going to give any more time to users to accept the new privacy terms, indicating the seriousness of the company in this regard. However, they later told the Delhi High Court, during a hearing on the new privacy policy, that they were putting it on hold till such time as the Personal Data Protection Bill comes into force (Mathur, 2021).

WhatsApp Payments was introduced in India on a trial basis in February 2018 and fully rolled out in November 2020, initially for 20 million users ("WhatsApp Pay Remains", 2021). It was reported that this cap was placed to ensure that no one single player corners most of the market share (Mishra, 2020). Also, there was no big announcement or marketing push for users to adopt it and most users seemed unaware of its existence. Two factors have

limited the growth of WhatsApp Payments, according to experts: that the offering is for peer-to-peer (P2P) payment and not peer-to-market (P2M), and that there is a cap of 30% on total transaction volumes on all Unified Payments Interface (UPI) payments services (imposed in November 2020). Facebook, WhatsApp's parent company, had acquired 9.9% stake in Jio Platforms in April 2020 with the hope that their partnership with Jio Mart would help push up usage of WhatsApp Payment. However, the gap between the top three UPI Payments services such as PhonePe, Google Pay and Paytm, and WhatsApp Payments remains "epic" with the latter's transactions amounting to a mere fraction of the others as of February 2021 (Soni, 2021). However, WhatsApp Pay did manage to enrol 100 million users by April 2022 (J, 2023).

This chapter has relied on secondary data, a survey of 205 people across India, as well as interviews with small business owners, NGOs, media organisations and marketing gurus and academics. Most survey respondents were not using WhatsApp for business but anecdotal evidence suggested an increasing number of users being pinged by micro businesses, mostly run from homes such as for second-hand sarees, tiffin services and such. Also, promotional material from stores formed a large part of cold-texts on WhatsApp. The following paragraphs detail the kind of uses WhatsApp was being put to by different categories of businesses.

### WhatsApp for Small Businesses

Even before the pandemic, small businesses had found uses for WhatsApp. In a quiet corner of Jharkhand lies Bundu (Population: 21, 054) ("Bundu Town Population", n.d.), some 50 kms from Ranchi, the state capital. At any time on a given day, a small group of women can be found sitting in the thatched verandas of Aadhar (a women's cooperative), toiling over terracotta figurines, masks and jewellery. Terracotta is derived from a Latin word meaning "baked earth", and that is what exactly this is. Tens of women, sitting on mud floors, shaping mud into wearable items or turning them into artefacts of beauty. What they make will then go into the kiln in the central courtyard where they will be baked and after cooling, painted. The painted *diyas* or earthen lamps are filled with wax and made into intriguing shapes – fish, turtle and drums – and are then ready to be shipped.

Reshma Dutta, the one-woman force behind Aadhar, the cooperative that runs the business, says, "how does anybody who wants to buy these items get to know of them?" (R. Dutta. personal communication, 14.5.2018). This was her concern when she toiled to set up exhibitions in cities like Delhi and Ranchi, which were sold out within days. The idea behind setting up a website was to enable customers to get to know of the products. Then came WhatsApp. *That* was a game changer for her. "WhatsApp has made things easy … *mujhe bahut kaam aata hai* (is useful for me). Frankly speaking,

more than anything, Instagram (etc.) … WhatsApp is something that is really helping me. It's *so* helpful". However, the messenger platform cannot take the place of the human touch in sourcing materials. Before WhatsApp, they had to send out people when they wanted terracotta workers in other areas to make products for them. After the arrival of WhatsApp, she says, "[i]t's a very easy thing for me now … what we do is, we send our designs on WhatsApp and they make it. So, now I just send my designs on WhatsApp and I don't have to go anywhere". She believes others who use design patterns in their products would also be similarly benefitted. In her own words:

> The last few years we have not been displaying our items at JharCraft (the State Emporium) and those who come to know of Aadhar don't know where to pick up our products from. Not everybody can come to Bundu to our showroom. So what we do is, we send them photographs of our products/ our brochure on WhatsApp and once they okay the one they like, I just post it from Ranchi to their address.

Comparing the media platforms of Facebook and WhatsApp in terms of conversion, she says that though their page on Facebook gets many likes, the conversion to buying rarely takes place. She blames the heavy advertising required for that, which she is unable to do, saying "I can't compete with the likes of Limeroad and Club Factory, Amazon etc." WhatsApp conversations flow between the artist/owner of the cooperative and her peers in Kolkata, Delhi etc., but they do not flow between the management and the workers, mainly because the workers lack smartphones. Reshma is quick to concede that giving the workers smartphones might be beneficial to her organisation, but says she has not really thought about that.

Similar stories of WhatsApp coming to the aid of small businesses and NGOs have been reported in publications throughout the country. *The Hindu* reported in Feb 2017 that in Dharavi, Asia's largest slum, a garment workshop owner was finding it difficult to keep afloat in the face of competition and losses, so he switched his business model from producing everything in Dharavi to outsourcing it to his fellow hometown vendors located in Delhi, where space and labour was not at such a premium. He has rented out his warehouses and workshops and uses WhatsApp to take orders (Echanove & Srivastava, 2018).

This replication of the process of outsourcing (used earlier by multinational companies across nations), at the local level with the use of technology and cheap transportation, is transforming the way small businesses are working in India.

Like Reshma, a number of small business owners struggle with the technology needed to set up a website and the money required to get it going, as well as to update it. Social media platforms such as Facebook and Twitter

seem too daunting for them to handle too; but WhatsApp with its ease of use and the small scale of clientele one is talking to puts them at ease. Reshma spent Rs.10,000 on launching a website for Aadhar and found virtually no returns on her investment; the added headache was needing a person to update the site with new product photos. With WhatsApp on a smartphone, all she needed to do was to point and click a picture and then share it with one or multiple people, singly or in groups. The intimacy of WhatsApp, with its limitation of not having more than 256 people in each group, would

**FIGURE 9.1** A Self-employed Tailor Using WhatsApp Voice Notes to Deliver Orders to His Customers.

*Source:* Screenshot by authors

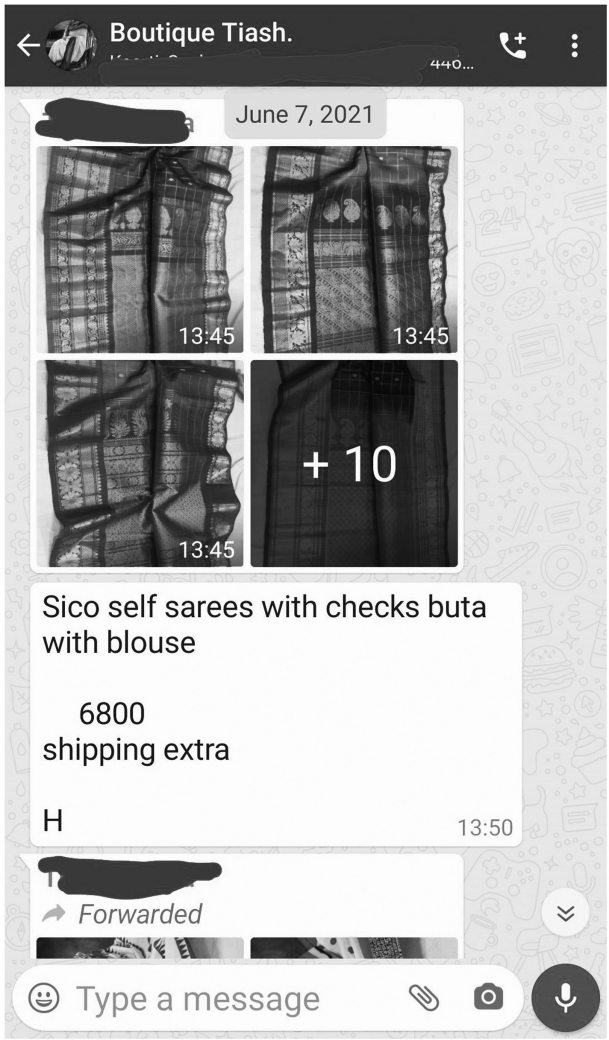


**FIGURE 9.2** A Businesswoman Marketing Sarees via WhatsApp Groups.

*Source:* Authors' screenshot

ensure that her audience would be more likely to look at her products, as well as share them with their peers. The WhatsApp feature of allowing media to be stored on devices upon sharing would mean those who were sent the pictures could share it ahead.

In fact, WhatsApp has prompted innovations in ways to do business, like the man from Malihabad, famous for its mangoes, who is trying to sell mango *trees* from his region via WhatsApp (Subramanian, 2017).

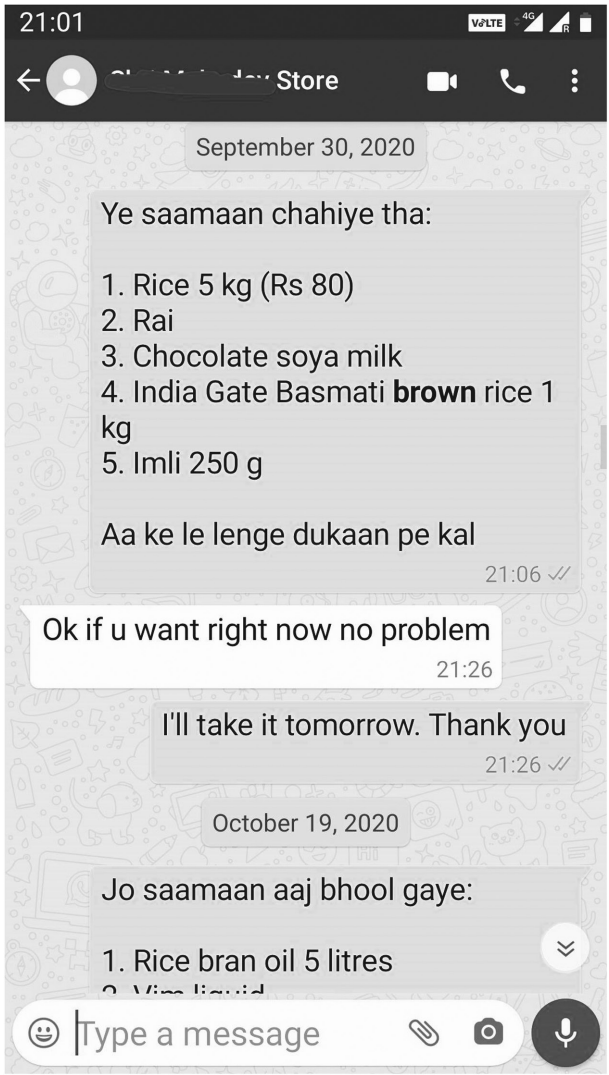


**FIGURE 9.3** A Neighbourhood Grocery Store Selling Products via WhatsApp.

*Source:* Authors' screenshot

Gurugram's horticulture department has come up with an innovative solution for marketing their organic produce, connecting community groups producing organically grown vegetables to their friends, relatives and neighbours through WhatsApp groups. This connected channel of growers to consumers received support from the department for "a central processing, distribution and delivery system" (Pant, 2017).

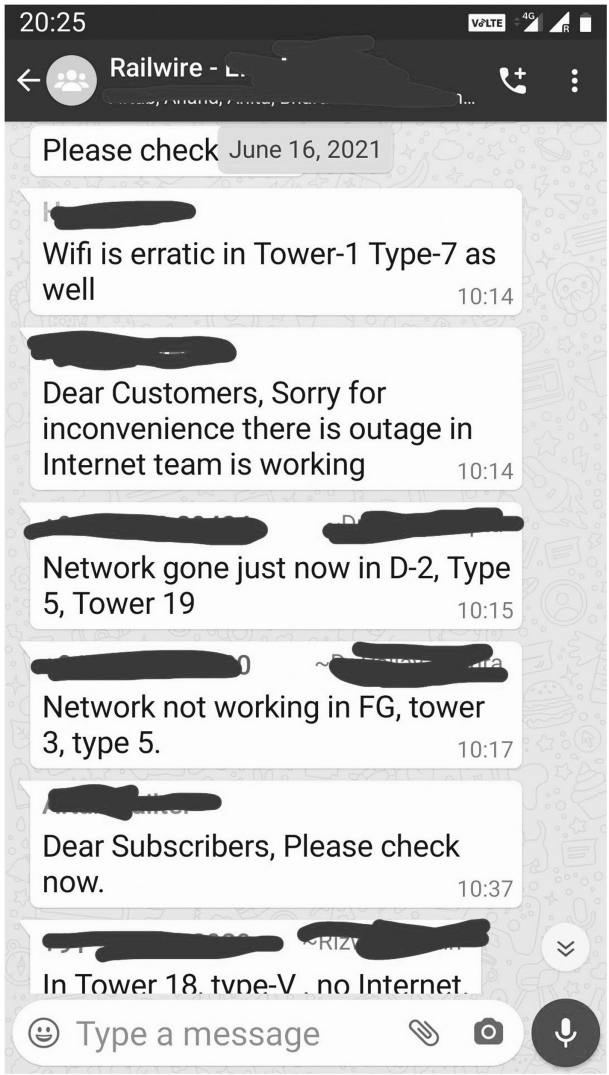
20:25
Railwire -
Please check
June 16, 2021
Wifi is erratic in Tower-1 Type-7 as well
10:14
Dear Customers, Sorry for inconvenience there is outage in Internet team is working
10:14
Network gone just now in D-2, Type 5, Tower 19
10:15
Network not working in FG, tower 3, type 5.
10:17
Dear Subscribers, Please check now.
10:37
In Tower 18, type-V , no Internet.
Type a message

**FIGURE 9.4** A Telecom Service Provider Interacting with Customers via a WhatsApp Group.

*Source:* Authors' screenshot

### WhatsApp for Luxury Products and the Service Industry

These very factors of intimacy and easy sharing also prompt goods on the other end of the spectrum – luxury products – to be sold through WhatsApp. Terming it "conversational commerce", Phil Granof, CMO of NewStore,

says, "the idea that you basically put a retail relationship where the consumer is putting in a lot of time, makes absolute sense" ("Why Net-a-Porter Wants To", n.d.).

Even large businesses in the service industry are now making use of WhatsApp to interact with customers. MakeMyTrip is a good example. MakeMyTrip is an online company providing travel services. Once a booking is made for a flight or hotel room through them, the confirmation message is sent via WhatsApp, which has links to the hotel location on GPS etc. embedded. Organisations such as BookMyShow send the ticket confirmation over WhatsApp, as well as the QR code which can be shown to a QR code reader for entry, via WhatsApp. Personalised messages, which enable a one-on-one communication with customers, are like a "gold mine" for organisations (Sushma, 2018). Using "Artificial Intelligence (AI), data analytics and voice recognition technology", businesses are upping the ante in terms of micro-targeting customers and engaging with them. Suman De, who heads the Products Division at Cleartrip (another online travel firm), is quoted in the same report: "WhatsApp makes perfect sense because it is one app everyone knows how to use".

### *WhatsApp for Business: A Distinct Identity*

WhatsApp officially launched WhatsApp for Business in January 2018 because of the interest in the small business market to use the app for business. According to WhatsApp's own blog, their new app "will make it easier for companies to connect with customers, and more convenient for our (their) 1.3 billion users to chat with businesses that matter to them" ("Introducing the WhatsApp", 2018). Among the features of this app is smart messaging that would prove convenient for small businesses such as quick replies to frequently asked questions, greeting messages for the introduction to the firm and "away" messages for when the business owner is not in a position to respond immediately. The app will also allow simple metrics to track at least basic information such as the number of messages read to help businesses work out their strategies. Apart from this, there will be a sort of directory for customers of businesses in various areas and business profiles for the organisations using it. Very importantly, WhatsApp Web will allow the businesses to chat using a laptop/desktop too. To make it clear to customers that they are talking to a business organisation, those using this app will be clearly marked as business accounts, which over time will get converted to Confirmed Accounts once it is verified that the account numbers match the business phone number. This could be a sticking point for businesses as they will be able to quote only one number for their business, and this will have to be separate from the number being used on a personal profile as all accounts can only be linked to one number. The business profile will include links to

email addresses, website etc. of the organisation also. Quoting a Morning Consult study, the blog also says that over 80% of small businesses in India and Brazil say "WhatsApp helps them both communicate with customers and grow their business today". So, how is WhatsApp business going to be different from other business apps? For one, the ease of use associated with the app will allow users to feel more comfortable with it, those using WhatsApp already need to just switch over to the business version. Also, since its userbase is already developed, its reach will be much wider and it is free to use. The WhatsApp for Business app earned a worldwide revenue of $906 million in 2022, as per reports (Iqbal, 2023).

The WhatsApp Business app is basically meant for the small businesses so that they can engage with customers from a single device. However, the WhatsApp Business Platform is meant for "medium and large businesses who can chat with customers at scale through programmatic access to WhatsApp" ("FAQs: Get Some Answers", 2023).

As of July 2020, 50 million monthly people were using WhatsApp for Business globally. In India, there were around 15 million monthly users (Bhatka, 2020). Some additional functionalities have been introduced, such as an interactive QR code that can be put up on storefronts or on other commercial material such as packaging or receipts etc. The QR code leads customers directly to the business' official chat account. Customised greetings for new customers as well as catalogues, services and products etc. made shareable via links are other features that have been added.

### Problematic Usage of WhatsApp

The ease of use of WhatsApp also has a flipside with it being used as a tool for illegal trade. The *Deccan Chronicle* newspaper reports of a flourishing racket in illegal trade of exotic birds and animals in the country via WhatsApp (Puppala, 2017). These sales used to take place through word of mouth, which has now been replaced by messenger apps, mainly WhatsApp. Traders take time-stamped photos of birds or animals in their possession and post these in carefully monitored WhatsApp groups, where the sale price is negotiated. Once finalised, these are then sent to buyers via buses or trains, which have virtually no monitoring of luggage. Members of such groups who are merely "lurkers" or ask too many questions or who do not buy anything are blocked by the administrators to prevent them from being infiltrated. WhatsApp is not only cheap to run, the conversations are not public, except if there is a mole, information exchange is very simple, hence its usage is rampant for trades like this.

In a drug-peddling ring bust, the Hyderabad police found drugs being sold exclusively through WhatsApp to celebrities and school children. The kingpin of the ring procured the drugs through international contacts, who

he got in touch with through WhatsApp chat, with SIM cards bought for the sole purpose of using them on the app. Not a single call was made using these numbers. The entire transaction was completed through a chain of peddlers and came to light only after an insider tip. Drugs like cocaine, heroin, LSD etc. were sent via post to clients and complete anonymity was ensured (Anusha, 2017). Newspaper reports say the drugs were made to look like toffees to peddle to school children. The drug peddlers stored client information in code words and nicknames and had about 1,000 of them in their database. The drug ring affected youngsters from about 26 schools and 27 (mainly professional) colleges (Ramu, 2017). In fact, newspaper reports suggest that WhatsApp has become a favourite tool of criminals as the app is encrypted and cannot be surveilled by authorities. WhatsApp call records also normally cannot be tracked and are hence a preferred way of communicating for those involved in illegal activities such as betting and prostitution (Trivedi, 2017).

The use of a WhatsApp group for insider trading made headlines in India in July 2017 wherein a WhatsApp group "Market Chatter", comprising 45 individuals, was said to be leaking information about Dr Reddy's Laboratories financial quarter results. The leak was traced back to an accountant later. Reuters reportedly has documented information about 12 such similar cases of "prescient messages", which are in actual fact insider information, circulating on private messaging groups. Given the fact that the group messages cannot be read by outsiders as these are encrypted, the discovery was made possible only through information shared by group members on condition of anonymity. Though it could not be ascertained whether the members had profited from the information, the fact of circulation of such information is itself a breach of law, as per the Securities and Exchange Board of India (SEBI) (Nam, 2017).

### WhatsApp for Promotions

Apart from business, WhatsApp can also be used effectively for marketing of products. Some of the ways in which it has become popular with offline stores is sending WhatsApp messages to their database on new products, promotions etc.; Meena Bazaar, a retail chain selling garments in Delhi, is one such example. Once you are a customer, they have your details and start sending promotional offers, product pictures etc. via WhatsApp. Red FM in Mumbai was one of the first to start a radio programme named *WhatsApp ka Star* to capitalise on the strengths of this medium in 2014. Listeners were given a number where they could record a song and send via WhatsApp. The songs entered were evaluated by the Red FM team and the best auditions were featured in Red FM live ("Red FM Launches", 2014). About 22,000 entries were received for the contest in Mumbai alone, leading to extension of the contest to Pune and Bengaluru (Gangal, n.d.).

Many companies are also using the broadcast feature of WhatsApp as a marketing tool. Software such as WhatsApp bulk sender and other automation for the app are helping businesses use WhatsApp effectively. Apart from this, vendors such as www.WhatsAppchannels.com enable businesses to buy WhatsApp channels in bulk, otherwise there are marketing agencies that can help with marketing on the platform (Ratan, 2018). Marketers recommend using the broadcast feature, updation of statuses and adding of a call-to-action button on the app for better results. Compared to other social media platforms, WhatsApp has the advantage of a very high rate of opening, greater engagement, hardly any costs (as the feature of paid promotion is not there), "scalable yet one-to-one conversations", less clutter and loyal subscribers. A website quotes Jai Sharma, owner of *WhatsApp Marketing Service*, as saying: "Our clients see more than 95% open rate for each of their marketing campaigns. It's because … not much competition exists when you directly reach your clients on their primary messaging app for communication" (WhatsApp, 2017). Looking at it from the consumer's point of view, however, we find that unsolicited messaging on the platform elicits a sharp reaction from consumers on all platforms, though the reaction on WhatsApp is muted.

### WhatsApp – Future Trends

To glean a better understanding of marketing strategies when it comes to WhatsApp, the authors interviewed two experts from the field: Dr Samir Kapur, who is Director at Adfactors PR and a Communications Consultant and Professor Jaishri Jethwaney, who is a respected academic in the field of advertising and marketing.

Samir Kapur (S. Kapur, personal communication, 4.5.2018) gave some interesting insights on how high-end brands are using WhatsApp to market their products. He described how Absolut Vodka launched "Absolut Unique", a limited collection of their brand, and to celebrate the launch, they hosted an exclusive party for which only two invites were available to the public. To quote:

> To bag these invites, customers would need to send a WhatsApp message to a designated number and interact with a virtual doorman called "Sven". The trick was to be as creative as possible and convince Sven why you deserved the tickets to the party. Apart from being creative and interactive, the campaign was also extremely funny, as well as being fun. Users sent everything from crazy videos to the most hilarious voice notes you could possibly imagine. The campaign which took place over 3 days, saw the company interact with over 600 users and receive more than 1000 image, video and audio messages sent to convince "Sven".

In another example, which Kapur says was

> implemented in a popular Delhi restaurant by India's leading advertising agency DentsuWebchutney, the liquor ticker concept featured a running ticker in place of a WhatsApp status and a GIF in place of a profile picture. The ticker displayed new offers, new logos, new menus, new gigs to contacts who had saved the Cafe's number. To communicate on new offers, the restaurant created a "blinking status" that was enough to catch any body's and everybody's attention. All the user had to do was save the restaurant's number and update their WhatsApp contact list. The campaign saw the restaurant's enquiries go up by a staggering 117% while the sales shot up by 28% during the campaign period.

So, how is WhatsApp figuring in the agenda of marketers and brand managers? What came to the fore in discussions with Professor Jaishri Jethwaney (J. Jethwaney, personal communication, 7.5.2018) was that while WhatsApp could no longer be ignored by marketers,

> the app format is such that it is up to the receiver to open it or report spam. … One can use WhatsApp to send images, audio files, short video clips of your products and text messages to users across the world. Unlike SMS or Email, there are less restriction on the format and delivery chances are higher.

But "marketing experts advise that ideally one should use WhatsApp to connect with existing loyal customers rather than trying to reach new users as no one really likes to access messages coming from unknown numbers".

Kapur believes that

> "the phenomenal rise of WhatsApp and other social messaging apps means that marketers can't afford to leave this new platform out of their brand strategy. Marketers around the world are busy figuring out the best possible ways to tap into this highly engaged audience on various social messaging apps without being intrusive to their experience".

He agrees that not allowing in-app advertising on WhatsApp in order to keep "the user experience intact and fuss-free" is, in fact, "one of the biggest drivers of its phenomenal growth". But that also means that "marketers are still largely waiting on tapping into social messaging platforms, especially WhatsApp". He says:

> WhatsApp also removed its nominal annual subscription fees of $1, and became completely free for its users. It is speculated that WhatsApp did

> it in anticipation of growth of Conversational Commerce. They will test tools that allow you to use WhatsApp to communicate with businesses and organizations that you want to hear from. That could mean communicating with your bank about whether a recent transaction was fraudulent, or with an airline about a delayed flight. Consumers get these messages elsewhere today – through text messages and phone calls – so they want to test new tools to make this easier to do on WhatsApp, while still giving consumer an experience without third-party ads and spam.

In the coming months and years, he says:

> Don't be surprised if … there's going to be some competition for chatbots that plug into WhatsApp to let your brand test markets abroad. With how smart AI has been getting, perhaps these tools can even help land more sales without any effort.

In his words:

> As WhatsApp is going to grow its massive reach, the potential for the technology built around it could be tremendous and teach marketers a thing or two about connecting with their base. Considering they've never sold advertising on the platform, brands have to get creative with how they can engage with users. And if it's making them step their game up, that's a win for everybody.

However, the one big hiccup with using WhatsApp for brand management is the lack of measurability and authentic usage statistics. The app being encrypted prevents simple audience measurements. One way to get around that could be to measure engagement instead. Samir Kapur is optimistic that the app can be used effectively in this way. He says:

> Many brands have begun using WhatsApp as a "contest platform" – a platform on which consumers can participate in a contest. Most contests require consumers to send their entries, via WhatsApp, most often in image, audio or video format. The platform has become a favourite among both, mainline brands like Sony DADC, as well as media brands like radio channels. In the case of Colgate, people were invited to send selfies of their smile, via WhatsApp, to a phone number displayed on the toothpaste pack. The carrot: a chance to be styled by brand ambassador Sonam Kapoor's stylist. In the campaign for Ceat, aimed at promoting the "Authentic North-East" expedition in affiliation with Mahindra Adventures, WhatsApp was the last of four digital platforms to be used, after Facebook, Twitter and Instagram, in that order.

Jethwaney is also optimistic about the platform being used effectively for brand promotion. She says: "The marketers are enthusiastic and upbeat about the medium as it can send images, e-books, catalogues, brochures, movie clips. This can also work as an excellent survey medium. Messages are not lost in a clutter".

Both experts believe WhatsApp can be a very useful tool for crisis management. As Jethwaney says, "if the companies have a database of their customers, they can be reached fast and updated about the issue, creating an empathetic bond between the company and its customers". This is the factor of intimacy that WhatsApp helps create by enabling one-on-one communication. Samir Kapur believes that when a company is in the midst of a product recall, or fighting nasty rumours or going through an accident or other kinds of crises,

> WhatsApp can help in mitigating crisis Management in the Digital Era by leveraging Online Influencers as Social Advocates. At the time of crisis, brand loyalists help in keeping the brand communications humane. They become a source of news as well as a trustworthy communicator between the brand and their audience. They spread the word in multiple ways, through stories and visuals, and assure people of the brand's integrity.

For marketers looking to harness the potential of WhatsApp, Kapur's advice is as follows:

> Among the many ways to stand out on WhatsApp – killer content, amazing visuals, specific formatting, and more – one that often gets overlooked is voice. We don't want brands talking at us as if we are money bags. We want authentic communication. Finding a voice for your social media marketing can be difficult because the concept is somewhat unlike other optimization strategies online. Voice is not a statistic you can track or a design element you can tweak. Voice goes deeper than that. Instead of tracking and analyzing, you can plan and practice.

Jethwaney opines:

> Marketers in my view should not treat it as an informal medium but innovate it to make it "marketing by invitation". In their messaging if they can devise a system which could ask the receiver if he/she was interested in the brand message/product demo, only then they may click, this would win them respect for not wasting other's time and also make people inquisitive about the message for which their permission was sought. This would in the end help the marketer.

### WhatsApp versus WeChat

A very pertinent comparison can be made of WhatsApp in India with WeChat in China, the two giants in the world of instant messaging. Started only seven years ago in 2011, WeChat is the number one platform in China with over 1.2 billion active users, as of 2020; this means that 90% of its 938 million users are concentrated there (Kemp, 2017). WhatsApp, on the other hand, is being used by over 1 billion people spread over 180 countries ("About WhatsApp", n.d.). In his announcement of the fourth quarter results for the company, Facebook (now Meta) CEO, Mark Zuckerberg in January 2018 said WhatsApp now has "crossed 1.5 billion monthly actives, with people sending 60 billion messages every day" (Zuckerberg, 2018). But unlike WeChat, which is like an all-in-one app, WhatsApp messenger is still testing out services like payment through it. As Jethwaney explains:

> It is kind of a multi-purpose media channel to provide a social platform. The interesting thing about WeChat is that the user needs only one app to text friends, check email, use social media and take pictures. According to *Adweek* magazine one can use the WeChat app to do the following things:
>
> - Pay bills and manage their bank accounts
> - Order food
> - Buy clothes and movie tickets
> - Book cabs
> - Make doctor's appointments
> - Post to social media
> - Send money to friends
> - Check in for flights
> - Read news. (Johnson, 2015)

With the kind of head start WeChat has had, it already has services like WeChat Stores for online shopping, WeChat Pay and WeChat Wallets for payments and features like expense tracking. Stores allow users to present their products and buying them is simple through WeChat payment options. A case study of a limited duration sale of Givenchy bags describes how WeChat capitalises on peer groups, led by KOP or Key Opinion Leaders to promote products and virtually create a stampede of WeChat users to buy them (Backaler, 2018). Around Valentine's Day in 2017, WeChat influencer Tao Liang, known for his blog on bags as *MrBags* with around 1.2 million followers, published a blog with WeChat announcing the sale of exclusive, limited edition, pink Givenchy bags for a short time. Coming on the eve of a gift-giving festival, the bags were positioned as something a man couldn't

refuse to buy for the woman he loves. The fact that they were priced high (around $2,700), but not beyond the daily transaction limits of WeChat, that they were showcased as being seen on the arms of celebrities and movers and shakers, and that there were only 80 of them (8 is a lucky number in China) for a limited time pushed people into buying them as soon as possible. To add to the fear of missing out (FOMO), users who booked the bags could only hold on to the booking for 15 minutes, failing which the bag would be placed in the market again. The campaign was such a success that the bags were sold out within 12 minutes of launch, earning a cool $173,652!

The possibilities with such a marrying together of messaging, banking, retailing and niche marketing are unlimited and can create powerful business models. In a recent opinion piece by the Brookings Institution, the think tank says that in 2016, Alipay and TenPay, the two biggest technology companies in China, accounted for more than 90% of mobile payments in China. The total mobile payments amounted to about $22.8 trillion, which was much higher than the volume of transactions in the United States at $112 billion. Of the two platforms, Alipay (Alibaba's venture) accounted for 54%, while Tencent's TenPay made up 37% of the transactions (Wang & Dollar, 2018).

Though India and China have some similarities in the way the mobile sector is growing and in their large populations, India has a robust banking sector, unlike China, and the disparity in governance structures in the two countries, as well as many other factors, does not allow a close parallel to be drawn. However, one can safely say that there are gaps in India's financial sector which could be filled by mobile payments, a rapidly growing sector, as predicted by reports such as the one by Credit Suisse ("Digital Payments", 2018). The report estimates digital payments in 2017–2018 to be at $200 billion, which could potentially go up to $1 trillion by 2023–2024, led by mobile payments which are currently estimated to be at a mere $10 billion (2017–2018). Citing the example of Google Pay, the report says that within four months of it being launched, it was processing as many transactions as the fourth-largest bank in India – Axis Bank. Quoting WhatsApp by name, the report forecasts a push to digital payments once the app launches the payment option. As per a report by the National Payments Council of India (NPCI), digital wallets were only second to cash payments as in-store payments in 2020. The projection is that by 2021, a third of all in-store payments would be by digital wallets (Singh, 2021).

WhatsApp is still in the initial stage of social e-commerce, as compared to WeChat. Having tasted success as a messaging platform, it is slowly rolling out the other features required for it to move to e-commerce. In that quest, WhatsApp has done a soft launch of *Payments*, a feature built on the UPI, which allows transactions based on verification of the linked

mobile number. On Android beta, WhatsApp has also started a new feature – *Request Payment*. This will allow users to borrow or lend money from contacts. These, along with the roll out of WhatsApp for Business, signify the steps WhatsApp is taking to move towards allowing commercial transactions on its platform. However, the *Request Payment* feature on WhatsApp was removed in February 2021. NASSCOM estimates that the Indian e-commerce market is about $14 billion, and growing at a 30% CAGR; by 2030, it estimates the market to touch $200 billion. Even given the presence of many other apps for payments, WhatsApp occupies a unique spot in being the app of choice for messaging for over 530 million people in India. Adding the element of ecommerce on it could make it the default choice for consumers who need not go to any other platform for completing their transactions.

## From Our Survey

Most respondents had not been approached for business through WhatsApp. However, those engaged in business enterprises said they used it for business purposes. For instance, Nikhi Dintakurthi, 21, Founder of BMM Guru ("a community for media students and media aspirants"), says he uses it for his business and finds that "for B (Business) to C (Consumer) it did reduced (*sic*) a lot of time gap". In his view he "would give credits to all my new enquires (*sic*) and I can label new people according to my business transitions". He also felt that for "(a) few small events that bigger platforms can't host or manage the ticketing, WhatsApp makes it reachable and approachable".

For Vadodara businessman Abhinav Aga, 39, "WhatsApp has been very, very helpful … for small customers, email has been replaced by WhatsApp". He also says he has been approached a lot of times via WhatsApp for business too. Assistant Professor, Niyati Pandya, also from Vadodara, says she uses WhatsApp

> to make purchase inquiries e.g. if I want a product from the *First Cry* store in Baroda I can ask them about its availability and cost in store vs online. Even orders and pricing for groceries is possible now through WhatsApp.

She adds that "Stores have WhatsApp groups these days to inform you about deals and prices and availability". Most other respondents said they have not been approached on WhatsApp for business purposes.

## Conclusion

WhatsApp has been an excellent platform for small businesses due to ease of use and its ability to connect the producer, management and market at the

same time. Some success stories like that of a Dharavi slum dweller being able to outsource products to Delhi and taking orders on WhatsApp to sell are stories of hope. Unlike setting up websites or being part of online retail, small businesses find it easier to deal with WhatsApp with its remarkably easy to navigate user interface.

From small businesses to luxury goods sellers, the factors of intimacy and easy sharing allow WhatsApp to build "conversational commerce" and interact with premium customers. Other businesses such as online booking platforms and ticketing agencies are also using WhatsApp for personalised messaging and customer support. Stores are also able to send their catalogue and promotional offers to their database. Like all technology, the dark side of business is also able to use WhatsApp, such as the sale of exotic birds and animals, which is illegal in India, or drugs.

In interviews conducted by the authors, experts advised that WhatsApp might be a better medium to connect with existing loyal customers and should not be used for the equivalent of cold-calling. But with WhatsApp for Business also coming to the country in 2018, marketers cannot afford to ignore the app. Though WhatsApp has some issues such as lack of metrics as it is encrypted, it can work as a good platform for surveys and for messaging that marketers do not want to get lost in the clutter. They also believe it can be very useful in crisis management and in creating brand voice.

In the authors' survey however, little enthusiasm for WhatsApp as a business app was found. Almost all respondents said they had not been contacted for business purposes on WhatsApp and that they had not really used it for buying or selling goods. WhatsApp Payments has also earned a tepid response in the four months (up to March 2021) since its launch.

WhatsApp has a long way to go in comparison with WeChat for business purposes as that is a complete platform in itself: promotions, payments, customer support, all can be handled by that one platform. However, messaging platforms have the potential to be "stickier" and the WhatsApp story in terms of business is still unfolding in India.

Here's the story of The Quint, a news platform that came up as a business on the strength of social media, particularly WhatsApp, though they had to switch over later to Telegram due to policy issues with WhatsApp. The Quint was the first digital news platform that showed how the attention of youngsters could be captured on Messenger apps.

In an interview with the authors in July 2018, Sohini Guha Roy, the Social Media Editor told us how The Quint manages to keep its balance on WhatsApp

– sending neither too many messages nor too little to keep their audiences engaged and giving them control with options to customise.

The launch of The Quint in 2015 heralded a new way of consuming news in India with the digital news media platform being one of the first to use "snackable content formats such as 360-degree videos, elections on mobile, podcasts and interactive stories" ("Raghav Bahl and Ritu Kapur's", 2019). The platform started as a Facebook page (Sen & Nielsen, 2016, p. 13) and then went on to have one of the biggest audiences among news outlets on WhatsApp. As per a CrowdTangle report of February 2019 (quoted in the exchange4media.com article), it had a reach of 100 million viewers every month and on WhatsApp it had over 1,75,000 subscribers, of which nearly 69% were millennials. As on date though, they have a minimal presence on WhatsApp, where users can merely request highlights of news. This happened, we are told, due to restriction on publishers imposed by WhatsApp. However, at the time this interview was done, they were at the zenith of their subscriber base on WhatsApp, giving their readers a substantial choice in the way they wanted to consume news.

Sohini Guharoy, their Social Media Editor, gave an insight into how they understood their audiences so well. She says:

> The Quint is for everyone who likes news, politics, technology, the basic news that we're doing, along with opinions and op-ed, just like you would see in any newspaper, but we also have a vertical only dedicated to millennials, The Quint Neon, which does news with a twist. The TG for Neon is millennials, we speak their language, we address things that they would want to say, so if GST has been taken off sanitary pads, what would the young India say, what does their voice say? So, Quint Neon is that specific body, we do a lot of fun, we do a lot of masti there on Neon, so the character is a little different than that of Quint. We have Quint Fit which is completely a health vertical, and we have Bloomberg Quint which is business vertical. So, these are the four main pillars that we have under Quint Media.

Explaining their journey from a Facebook page to a massive presence on WhatsApp, she says,

> WhatsApp is a very natural progression for us because it's very important for us to reach our audience where they are. And the way news is circulated in WhatsApp, it's a great thing for us if our news is being circulated in a similar way.

They started by making small groups on WhatsApp:

> So the first time we said, okay fine let's open a WhatsApp group, we would want say about 500, so we'll create two groups and see how many people

> would want to follow The Quint and who would want to follow the news that The Quint has to offer. And we started it off and we, in about less than 48 hours, we got about 8,000 requests! And that was something we were not prepared for.

But WhatsApp works differently for business and for publishers, she explains –

> so if you buy a ticket on BookMyShow nowadays, if you put your number, you get a WhatsApp message instantly, the number comes. But that's for business, that's what WhatsApp for Business is catering to, not publishers. Publishers are completely different. Here we're pushing our content, so it can be in the form of text piece, video piece, or meme or native video in several formats that we're sending.

To prevent subscribers from feeling information fatigue, they had designed their offering to be customisable. One could choose to get inputs in different categories, say "about news, breaking news, technology, Bollywood. So, you sign in we give you the option, you can choose from this platter and once you choose, decide, accordingly you'll get the news". Their policy also was to

> encourage our readers to share the content as much, because the more it gets shared, the more page-views we get, the number that read, the time spent on the page is more. So that it's like a domino effect that just keeps happening, so that's there.

The idea was "we just wanted our content to travel".

The Quint also has a sizeable presence on Facebook Messenger but their strategy for even seemingly similar messaging platforms was different. As Sohini explains, not only the strategy but even the content is different for the two platforms. For instance:

> We run campaigns there (on FB Messenger). So, throughout FIFA, we're running this campaign, that you'll get all the coverage here so if you want to opt in and get these news, you can select here. These are people who have opted in; say 5,000–6,000 people opt in and say, hey I want my FIFA news from The Quint on my FB Messenger. And once they opt in we send them. So, there are polls, there are games, so that's a separate universe that we take them to. It is very different from what WhatsApp offers.

And this difference in approach is because the

> user behaviour is different – WhatsApp is more personal than an FBM, not everyone has an FBM downloaded separately as an app on their phones.

> But WhatsApp, yes, everyone is there. And you wouldn't want the ting-ting-ting all the time, notifications you can switch that off, but the nature is very different, the audience consumption, the way you consume the two platforms is very different. I mean, you're the same person but my behaviour is very different on WhatsApp as compared to FBM.

As to other different social media platforms, she says,

> the way we strategise for all these platforms is very different and it's different because the kind of content you're offering to these people is different. Because you might log in to Twitter once a day for a person who is not in the news-y business. I mean, my Mum, she doesn't even log in, she just created one, they don't have an account. So that's not my place where I can go and keep bombarding. I know where my TG, what kind, what percentage of my TG is there on Twitter. But I also know what are the kind of people who would consume my WhatsApp, the content that I push through WhatsApp. So the strategies that we have for the platforms are different.

For creating content for different platforms, she says,

> there's the social media team and the audience engagement team who work with me here on this. So, we customise all the content, the way we distribute the content on these platforms that's where we customise, the writers and everything is the same. Because at the end of the day it all leads to the website, but the way I'm pushing the news to you will be different, the format will be different.

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# 10

# CONCLUSIONS

## The WhatsApp Way of Life

### Back to the Future

***Year: 2027, Location: India – Two Fictitious Scenarios Follow***[1]

**Scenario 1**: *WhatsApp Plus, an updated version of WhatsApp, is being used by Chandramukhi, one of a billion Indian users. In the blink of an eye WhatsApp is activated and she sends a quick message to her friend saying hello. WhatsApp is now hands-free and her message automatically goes in her preferred mode, a voice note. Emojis are translated into laughter or angry tones. WhatsApp has roughly doubled its total users in India between 2021 and 2027. It has integrated payments within it. Almost all urban adults and a majority of rural adults are users of this app. They spend more and more time on it as it has integrated to incorporate other features such as shopping, taxi bookings, micro-blogging, food delivery, dating etc. Artificial intelligence (AI) bots are now handling a lot of the commercial and business aspects of WhatsApp. It is the ultimate gateway to a mediated universe. Chandramukhi understands that some of her data harvested from WhatsApp is being shared with Facebook and Instagram. Her unique social media credit score is based on the Chinese prototype and has determined her shopping to dating experiences of late. She was even denied a loan by her bank recently because of her average score. Can she break out of the clutches of social media and leave WhatsApp?*

**Scenario 2**: *A WhatsApp clone, developed domestically, is being used by 400 million people. The great Indian firewall means WhatsApp and Twitter are no longer available within India. Chandan sighs as he writes*

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*a text to his parents in another city. He knows his text is being backed up on a domestic server where it is traceable by the government on demand. He wants to tell his parents about his state of finances but is afraid that the Indian Revenue System will get to know of it. He had sent some screenshots of his conversation with his cousin about his car that had officially crossed the registered time for use. But now he was having second thoughts – what if his cousin gets into trouble? But how much can he worry; his telecom network is anyway compromised and social media too. The only time he can probably be sure of his conversations not being monitored is when they are inside his head. His super smartphone made in China, search engine and other tech giants are forever listening in. The clone version of Alexa, Ankita is dogging his every digital step. The courts have also set aside the notion of privacy in the interest of "national security". It is hard to tell what is real or fake any more with third-generation deep fake content circulating on the social messenger platforms, thought Chandan.*

WhatsApp is the most popular messaging application across the world, having over 2 billion monthly active users spread across 100 countries in 2020 (Iqbal, 2021). As of early 2021, India was the country with the most WhatsApp users in the world, far outstripping Brazil and the United States, where it also had a substantial user base. Indonesia, Russia, Mexico and Germany also had 60–70 million users in 2020. It was also used in African countries, such as Nigeria and Kenya. While WhatsApp was launched as early as 2009, it has seen rapid growth in India in the last five to six years. The company saw a faster growth trajectory globally after it was acquired by media giant Facebook in 2014. Since the app integrates text, voice, video and phone calls, literacy and English language are not barriers to usage. Hence, it can be used across countries and different classes of users. The top two users of WhatsApp in terms of absolute numbers are India and Brazil, part of the Global South. One driver of growth in both countries is the multifunctionality of the app at the cost of Internet connectivity. WhatsApp has also enabled payments in its two biggest markets India and Brazil post 2018. As the statistics indicate, WhatsApp is popular across both developed and developing countries (Iqbal, 2021). End-to-end encryption introduced by WhatsApp meant that users were more confident of the security of their communications, helping the popularity of the app.

The importance of WhatsApp in users' daily lived experience is illustrated by the fact that WhatsApp has become a verb in the user's vocabulary ("Definition of WhatsApp Verb", 2023). The generic act of using text, voice or video on a social messaging platform is denoted by "WhatsApped" or "WhatsApping", whereas the competitors Signal and Telegram are still not denoted by telegrammed or Signalled for similar functions.

A lot has changed in the world since the authors set out on the quest of studying WhatsApp in India, in 2017. The Holy Grail may be the estimated over 500 million users of WhatsApp in India in 2021 ("Government Notifies", 2021). The world almost seemed unrecognisable as it threshed in the virulent web of Covid-19 after 2019. Trends of global digitisation and increased online activity in every dimension of human life which were discernible in late 2019 got a further impetus and grew rapidly as the world struggled with Covid-19 during 2020 and 2021. Social media, and more specifically social messaging, exhibited high growth rates, as part of this larger trend. In a post-Covid-19 world, the trajectory of growth of WhatsApp in India is still upwards as more users join the platform, partly fuelled by growth in users from rural areas.

Much like Jeffrey and Doron's (2013) research on the spread of the cell phone across India, the current study too finds the case of India so large and so complex, as well as under-researched, that it "deserves" an in-depth study as to the trends and impact of social messaging. Understanding the trajectory and impact of WhatsApp in India may throw light on its functioning in other countries as India is a multi-lingual and diverse nation, also currently the most populous country in the world. WhatsApp, as with other major communication technologies, has acted as an agent of glocalisation in India. Glocalisation, a term described by sociologist Roland Robertson (1994), refers to the incorporation of local elements into global processes, initially in the context of marketing. In other words, it is the growing importance of global levels simultaneously with regional and local levels, or combining universal with particular tendencies. This was later extended to describe other aspects of global and local flows of communications and goods and services. Along with global and international communications, WhatsApp with its integration of voice and video has also enabled rapid national, regional and local communication. The platform is global, but allows for seamless communications across geographies and in the language of the users' choice. Hence glocalisation, both global and local, has been incorporated in one communication app.

WhatsApp has deepened global trends such as integrating with the world. Since communication over WhatsApp is instantaneous and cost-free for users, other than Internet or Wi-Fi cost, communicating nationally and internationally is so much easier. In Arjun Appadurai's (1990) terms, flows of people, finance, ideas, technology and media are at a global level, forming part of the causes of globalisation. WhatsApp has definitely accelerated this process. As Karaponas et al. (2016) have surmised, WhatsApp is not a mere instant messaging tool but is used to unlock new opportunities for intimate communications, to enable creation of micro communities, and to richly support social practices such as collective lifelogging and reminiscing. To elaborate, lifelogging can be explained as maintaining a digital record of all

activities done by an individual (Rouse, 2013) and apps such as WhatsApp can help maintain digital records for groups too. Another way the app can be used is to help preserve memories, especially in intergenerational groups where young members might, for instance, learn about earlier times when old family photos are shared in the group.

India was no exception to a pandemic-struck world. Education, entertainment, work, all shifted online as India went in for a national lockdown in March 2020. WhatsApp, already popular with some segments of the Indian population grew fast, touching 530 million by early 2021 ("Government Notifies", 2021). While the macro aspects of increase in number of WhatsApp users across India have been informed by the study of secondary data, more micro aspects such as the hows and whys of usage, types of usage and impact of WhatsApp have emerged from both secondary data such as published reports and primary data gathered here.

The questions that the researchers had pondered upon, namely why were Indians using WhatsApp, how was WhatsApp being used in India and what impact did it have on users, have been studied via the survey, interviews and a few selected focus groups, anecdotal evidence and secondary reports.

## Findings

The canvas for the study was huge. WhatsApp has grown to mammoth proportions in India in terms of absolute numbers. Facebook, You Tube and WhatsApp are often cited by users to be their most preferred social media/apps in India. It is used for personal reasons, in a professional capacity, politics etc. Its usage by groups such as the physically challenged has also been explored. Aspects of regulation have been touched upon. While trends in terms of growth in number of users of WhatsApp globally and India can be understood in terms of Everett Rogers (1962) *Diffusion of Innovations* theory, that explains how, why and at what rate new ideas and technology spread. The argument is that the process by which innovation is communicated over time among the members of a society is via diffusion. The qualitative aspects of usage can be understood with reference to the work of diverse scholars as expressed in the following section.

Some of the trends uncovered in the expansion and impact of the cell phone, and more broadly the new media in India (Jeffrey and Doron, 2013); Narayan and Narayanan (2016) are again discernible in the case of expansion and impact of WhatsApp in India too. In terms of the diffusion of this app, it first started in urban areas and then penetrated into smaller towns, eventually percolating into rural areas (Rogers, 1962). The falling costs of smartphones and the expansion of the Internet to smaller towns and rural areas helped WhatsApp to grow its user base. One can conjecture that since the app is smartphone based, it was first adopted by more affluent and

educated users, more males than females. However, the time frame for this percolation is more compressed as compared to the arrival of the cell phone and its expansion across India. Part of the reason for this accelerated diffusion could be the arrival of Internet connectivity and cheaper data plans by companies such as Jio across many states. Availability of cheaper smartphones are also a driver of growth.

Another reason why WhatsApp has become so popular in India could be because culturally Indians often multitask, and also work along with various other distractions. This is unlike the West where work time and leisure time are clearly demarcated in an often-linear fashion. WhatsApp enables this multitasking in a fairly seamless manner. These insights were suggested by some of the survey respondents, and also based on anecdotal evidence.

The impact of Covid-19 implied that more activity – personal, professional and educational as well entertainment – shifted online in 2020. WhatsApp also got a fillip in this period. Manuel Castell's (2000) term for describing new media as a network of networks is also applicable in the microcosm of the Internet, which is WhatsApp. According to him networks make up the social morphology of our societies now. A person is connected to numerous other people and groups or a network via WhatsApp.

The aspect of collapsing social hierarchies first observed by Jeffrey and Doron (2013) in the context of the cell phone use in India has been given further impetus by the use and expansion of WhatsApp across India. Since it is a freeware, it seamlessly and at low cost (cheap connectivity) connects people across locations, regions and nations. It has also reduced the barriers between elders and the youth, employer and employee, gender, class and so on. Even the hierarchies of the teacher and the taught have been blurred with more horizontal learning taking place across groups.

WhatsApp has myriad uses. As detailed in previous chapters, it connects friends and families, it helps in maintaining relationships, it facilitates work and education and enables entertainment. It is especially valuable for those sections of society who may be struggling with physical or emotional challenges. As people using WhatsApp connect with more and more persons either individually or across groups, the network externality effect comes into play, implying the value of the network is more than the sum of its parts. This factor also helps to explain the "stickiness" of use of WhatsApp and why people may be reluctant to quit it even if they find it intrusive or irritating at times. As this research has shown, WhatsApp has impacted every sphere of life for users, from the generally disliked Good Morning messages flooding WhatsApp to the last good nights to friends and family scattered across different locations; WhatsApp is among the most used apps.

While there are many proven advantages of using WhatsApp, however, this research has demonstrated that the reverse side of the coin also prevails. Some WhatsApp users have been trolled or have been the victims of hate

speech, cybercrime or at the very least bullying or stalking, across groups. Other WhatsApp users, especially in conflict or border areas, have complained of being bombarded with propaganda via WhatsApp forwards. Employees have complained of employers giving them excess work outside of work hours in the evenings and at weekends, facilitated by WhatsApp. Regulators have been perplexed with how to regulate this fast-growing social media. As with any communications technology, it may be used either for pro-social or for antisocial purposes.

Some insights which have emerged from this study are summarised in the following sections.

### *Sociocultural and Psychological Aspects*

The "Imagined Communities" of Anderson (2016) might get reflected in WhatsApp groups, which experts believe could also include the "invented communities". The nuclear family groups were useful for keeping in touch in a non-intrusive way, with practical uses such as checking the whereabouts of the family members during the day. Larger intergenerational family groups facilitated by WhatsApp had good or bad dimensions with interconnectedness, as well as scope for miscommunication. Content circulating in intergenerational groups is different from that in groups where members are from the same generation. According to the sociologists interviewed, groups on this app can be thought of as representations of real communities and are important tools for socialisation because time and distance are issues in real life, especially as was observed during the pandemic. These extended family groups and some class or alumni groups were used for reminiscing and as part of this, exchanging old photographs and videos via WhatsApp. A good analogy for messages on WhatsApp groups would be like belonging to several parallel conversations. Across categories of those surveyed for this research, respondents said they liked to use WhatsApp primarily for keeping in touch with friends and family.

Friends and alumni networks served some functions such as information sharing and feeling connected; however, they often became battlegrounds for opposing ideologies, leading to squabbles and exits by some of the members. Many respondents expressed that they used WhatsApp to meet various needs, such as relatedness, or being connected to friends and family, as well as seeking popularity, through managing a carefully crafted display picture, status updates etc. These fit the framework of the uses and gratifications approach as to why persons wanted to use WhatsApp. Also, it met the psychological aspects of projecting a certain identity on social media.

Research on new media in terms of group dynamics and the echo-chamber effect suggests the trend towards reduced moderate voices and extreme

voices becoming more dominant, leading to polarisation. Many respondents indicated that they have been receiving propaganda over WhatsApp. Some users have been forced to quit certain WhatsApp groups because of ideological differences with other group members. Experts believe that the more the interaction with a mediated environment, the more one can get affected. This could lead to a homogenisation with standardised responses in relationships. Other problematic areas could be the increase in narcissistic tendencies, through the Display pictures, status updates and selfies. When the techno-self takes precedence over the real self, problems occur because the perception of life is not based on lived reality. Addictions are matters of concern with overuse of the app.

Experts also opine that what looks like an expansion of the public sphere in terms of access is not in terms of content, because content reaching the common man may not be democratic. It may be content which is pushed by certain interest groups either political or commercial. One could even argue that the access it gives is antithetical to the democratic discourse as it becomes a venue of biased views and misinformation. The simplified content of short messages and emoticons means that content on WhatsApp can be consumed like advertisements (S. Vivanathan, personal communication, 24.11.2017; M. Chaudhury, personal communication, 19.12.2017).

Insights from psychology (Suler, 2004) suggest that toxic disinhibition created by new media, including messaging apps, can lead to online aggression and bullying, as well as sexual or other harassment. The boundaries can get blurred very quickly with friendships turning into threatening interactions etc. But benign disinhibition through WhatsApp can lead to liking and attraction too. The increased usage of emojis in conversations, especially among the youth, points towards homogenisation of responses among them. Respect towards elders keeps some of the respondents from sharply retorting to messages forwarded by older relatives even if they don't agree with them.

Navin Kumar concedes that it is possible that WhatsApp has more impact as compared to other social media as there is more reciprocity in it so it will go out to a wider base. Also, there is less anonymity as compared to other social media as the phone number of the contact is revealed, along with the message. This may help in adding to the credibility of the source (N. Kumar, personal communication, 17.4.2018).

One worrying aspect of WhatsApp is its contribution to the upsetting of the natural circadian rhythm that humans follow which dictates that they sleep at night and are awake in the day time. Studies show that the amount of time spent chatting on WhatsApp and other social media in many instances is adversely affecting sleep patterns, relationships and cognitive processes such as attention spans, memory, self-esteem, decision making skills etc.

### *Personal Life*

WhatsApp seems to have become an important part of almost every user's personal life. It is instrumental in meeting many social and psychological needs of the users. The human need for meaningful interactions, validation, intimacy, empathy, socialisation, identity construction etc. have been facilitated by WhatsApp as expressed by many of the respondents of the survey as well as many of the persons interviewed. Social learning has also occurred via WhatsApp, for example the virtual Good Morning wishes via WhatsApp have spread rapidly across group members.

WhatsApp also figured surprisingly high in many respondents' list of priorities as to what they need in life. Maslow's hierarchy of needs described in the previous chapters gave some insights to examine how important WhatsApp is in the user's list of needs as compared to essentials such as air, water, food and transportation. Some interesting trends emerged as to how highly ranked WhatsApp is by many users, some even ranking it on par with affordable food and above cheap transport, even before the Covid-19 pandemic struck.

Since over half of the Indian respondents were in the young age group below 30 years of age, WhatsApp is important for information, enabling or supporting their education, entertainment and maintaining relations for this segment of the population, many of whom are students. Students use it for information, whether for classes or in general. The sense one gets from students is of their dependence on the app for education, information purposes, but there is an aversion to the continuous messaging on it. Only a third of the respondents (35 out of the 107) placed WhatsApp as their number one choice among the five popular platforms of WhatsApp, Facebook, Twitter, Instagram and LinkedIn. The caveat here is that the survey was concluded before the pandemic struck India in early 2020. Anecdotal evidence suggests that the popularity of WhatsApp increased in India during the pandemic.

The survey results also pointed to the fact that the primary reason for use of WhatsApp was to keep in touch with family and friends, whether in the same city or spread out geographically. However, each category had a top second reason for using WhatsApp: students said they *had* to be on WhatsApp to get information related to classes; government sector respondents gave "professional interactions" as a compelling reason to use the app; professionals liked the media-sharing features of WhatsApp; and housewives and the armed forces personnel liked to use it for entertainment/forwarded messages and teachers for "exchanging information". But the constant stream of messaging, and the constant expectation of a response, was something most respondents had a problem with. The frequent use of emojis to respond, especially among youngsters, leads towards the possibility of homogenisation of responses. Formation of common interest groups

and positive messaging were other aspects of use of WhatsApp. The problem of toxic disinhibition leading to complaints of stalking and misuse of the display picture also figured in the survey. Some participants in the survey went so far as to say they cannot live without WhatsApp, showing the centrality of the app in their lives. For foreigners temporarily residing in India, WhatsApp was a necessity to interact with Indian colleagues and acquaintances. Most said they were happy to use it as it was easy, inexpensive even for making audio and video calls and allowed them to retain their original country number.

Professionals are finding it hard to separate professional and personal chats and 24–7 offices. This aspect has been sharply brought out in the chapter on how professionals are using WhatsApp in their daily jobs. Older people look for entertainment and family chats on the app, while younger professionals are barely coping with the continuous flow of information. Addiction, anxiety and the Zero Inbox Syndrome are some of the effects of continuous and heavy usage of the app. "Useless information", especially "Good Morning messages", are a particular bugbear for most users. But most users cannot do without it as expressed by many of the respondents. WhatsApp if used in excess can cause anxiety or exacerbate it; there is social pressure to reply to messages. With persons putting in a lot of thought into status updates and display pictures, narcissistic tendencies can also be encouraged. In extreme cases it can facilitate adultery and crime. The problem of lack of trust in social media, particularly WhatsApp mentioned by students from Jammu, Kashmir and Ladakh, is a red flag too.

### *Professional and Business Uses*

WhatsApp groups have emerged as an important tool for administration and carrying out work-related tasks. Many professionals felt it improved efficiency, through the ease in talking to a group together in a virtual mode, sharing of documents and work-related office orders etc. However, many also felt that the blurring of boundaries between work and home and day and night meant that employees were finding that work-related WhatsApp was intruding into their personal space and negatively impacting their home life and leisure time. Apart from "official" office groups, an important finding was that many "unofficial" office groups were also in existence at various levels, minus the boss. Some of such same sex office groups took to exchanging jokes and messages of a salacious nature.

Experts have also warned against collapsing hierarchies affecting norms of behaviour as they no longer remain well-defined. With symbols of authority missing in mediated interactions, bosses and subordinates are likely to interact more as equals, leading to loss of inhibitions. The boundaries between what is appropriate and what is inappropriate in official communication also

tend to get blurred on WhatsApp. The factor of disinhibition could probably explain the rise of single-gender groups born out of professional ties.

In 2018, WhatsApp Payments was introduced in India on a trial basis. By April 2022 it had managed to enrol 100 million users. However, the feature has still not fulfilled its potential and the gap between WhatsApp Payments and the top three UPI payments services still remains very large. Reasons could be many, but some of them are lack of marketing push, cap of 30% on total transaction volumes on all UPI payment services, peer-to-peer (P2P) payment and not peer-to-market (P2M) (Soni, 2021). WhatsApp's parent company, Meta's acquisition of a 9.9% stake in the Jio platforms in 2020 was with the hope that this would bring in more users as the "U.S. tech giant hasn't made much of a dent in retail payments on its own" (Bose, 2022).

The launch of WhatsApp for Business in early 2018 was to push up the usage of the app for small businesses, as WhatsApp per se was not being looked at as a tool for business (evidenced by the authors' survey too). According to Nikhil Pahwa, WhatsApp for Business is the logical next step in the company's bid to monetise the app. The roll out of WhatsApp Payments in late 2020 is also to bring it in the e-commerce arena, though it has had a slow beginning as of March 2021. Other expert advice in interviews to authors was to use WhatsApp to connect to existing customers, rather than trying to create new ones through unsolicited messaging. With WhatsApp for Business and the insistence on adoption of the new privacy policy, announced in January 2021, WhatsApp is on the road to becoming another WeChat, though it is currently lagging behind the Chinese app.

### *Politics and Fake News*

WhatsApp has emerged as the battle ground for the political terrain. In fact, a study reports that WhatsApp in India has emerged as a source of news for more than half the population online (Newman et al., 2021). As described in the chapters on political communication and fake news, the information technology cells of political parties have outreach programmes for social media.

Content is made and distributed via social media platforms. WhatsApp, because of its ease of use and large number of users, has been a platform where a lot of political information is circulated – some genuine news items, some fake news. Uncertain times such as closely fought elections or the global pandemic which impacted the world in 2020–2021 also increased people's propensity to consume online content. WhatsApp helped to meet people's increased demand for information and entertainment. There is also the push or the supply side factor of more political content being circulated in the lead up to elections.

The social media strategist of Aam Aadmi Party, Ankit Lal, in his interview to the authors suggests that WhatsApp is very important for political

communication and is used for influencing opinions in the lead up to both state and national elections (A. Lal, personal communication, 20.12.2017). Given the usefulness of the app in pushing tailored content to micro-targeted groups, messaging in regional languages was set to grow and the app was likely to become a platform of choice for crisis management on social media. Voice notes was another underrated feature that could prove its worth in times to come. Reliance on perfect audio quality and average video quality to suffice for mobile phones is the mantra for the "content factories" producing on behalf of political parties which used broadcast lists also to push content to voters. Humour and fear – emotional appeals – were found to work best to resonate with voters. Toxic disinhibition, encouraged by the use of social media, including messaging apps, could be another factor for the spread of fake news.

The survey findings indicate, disturbingly so, that even though respondents were aware that propaganda was being fed to them via messaging on WhatsApp, it still managed to affect their opinions on issues. Over two-thirds of the armed forces personnel who responded expressed the belief that forwarded messages made them rethink their opinions "sometimes". Also, more than half of the students from the border Union Territories of Jammu and Kashmir, and Ladakh, were also certain that such messages helped them change their minds. This contrasted with the view held by students in the rest of the country only a quarter of whom felt that forwarded messages on WhatsApp made them change their minds on issues. Among the other categories – government officials, professionals/entrepreneurs, teachers – the percentage hovered between 22% and 30%.

The authors' survey shows that the factor of trust, or information coming from a credible source, has a major role to play in making users susceptible to fake news, even though most of those surveyed were aware of the problem, even more so in the case of the "difficult" area of Jammu and Kashmir and Ladakh. The other view which was unanimous was that the ultimate solution to guarding against fake news lies in digital media literacy. One other suggestion for dealing with electoral misinformation proposed by Shivam Shankar Singh (2019) is for WhatsApp to make public or not encrypt all groups where less than one-fifth the members have the admin's number saved. If technologically feasible, this could be an answer. In Nikhil Pahwa's opinion, the use of "counter speech" could go a long way in fighting fake news (N. Pahwa, personal communication, 8.12.2017).

### *Disability*

If there is one happy story to emerge from WhatsApp, largely devoid of any caveats, it is from the physically challenged group's use of it. The interviews and the focus groups with persons with visual, motor and speech and

hearing challenges, all had stories to relate about how WhatsApp was a lifeline, a socialisation tool and also useful for exchanging vital health- or employment-related information. Its versatility with text, voice and video as well as its asynchronous nature lends itself to ease of use for those living with disabilities. It was cited as being empowering and enabling, creating and maintaining virtual communities for persons with various challenges. It is a communication technology which because of its ease of use, multi-media and low cost goes a long way in bridging the gap between persons with disabilities and the "able"-bodied population. In future, it is expected that this app will be used by more and more of the challenged community, and for a wider range of functions than is currently available.

### *Regulation*

Many types of crimes such as lynchings, rapes and other heinous crimes correlated with fake news, hate speech, pornography etc. being circulated on WhatsApp. However, the causation link between such messages and the actual crimes are in many instances harder to prove. There have been discussions on tracing the originators of such problematic content on WhatsApp in a bid to prevent such crimes. However, the WhatsApp platform is not keen to comply with this as they claim their product is end-to-end encrypted. Decryption may devalue their whole product and drive users away.

The current approaches to regulation seem to be tilted towards holding the user responsible. However, the new intermediary guidelines that have come into force on May 26, 2021, may make it impossible for the social media platforms to evade liability in future. Media literacy efforts on behalf of certain large digital media companies are geared to making users more aware and more empowered. However, the average WhatsApp user has a long way to go in terms of being media literate. Shifting the onus of responsibility to the end user by relying on media literacy efforts may not be advisable in the current scenario where even formal literacy stands at below 80% of the population and digital media literacy and social media literacy are a far cry. If WhatsApp is not liable for the content of the messages, since there is end-to-end encryption, then who is responsible for crimes committed as a result of these messages? Since India does not have stringent data protection and privacy policies as in the case of Europe, it appears that Indian users may have to settle for a lesser degree of protection over their information shared via WhatsApp than their European counterparts.

The government of India released new social media guidelines on February 25, 2021. These guidelines seek to exercise more government control over various social media, including WhatsApp. The government could require platforms to quickly comply with government takedown requests, appoint compliance and grievance officers and identify the originator of

"problematic" messages. While the guidelines appear to be "protecting user's privacy", the government is also extending its control over social media via these actions (Dasgupta, 2021).

The Indian Government released new amendments to the 2021 Rules, notifying the Information Technology (Intermediary Guidelines and Digital Media Ethics Code) Amendment Rules, 2022. These Amendment Rules, 2022, have many implications. The compliance burden on intermediaries has increased. The risk to their safe harbour protections has also increased. Finally, an additional layer of censorship has been introduced by the Ministry of Electronics and Information Technology (MeitY), wherein the government-appointed committee would have a say in what content stays up on the Internet and what does not (Panjiar & Waghre, 2022).

The government issued a fresh notification in the Gazette on April 6, 2023, regarding amendments to the IT (Intermediary Guidelines and Digital Media Ethics Code) Rules, 2021, with respect to online gaming and fake or false information about Central Government business (MeitY, 2023).

Some legal scholars opine that the amendments rules of 2023 on intermediary guidelines amount to censorship on the part of the state. According to the 23 amendments, the Union Government has added the provision of a fact check unit to identify fake or misleading online information related to the government. Intermediaries such as social media companies or net service providers would be required to take action on content identified by the government-appointed fact check unit, or they may lose their safe harbour protections. The "safe harbour" protections in Section 79 of the IT Act allows intermediaries to avoid liabilities for what third parties post on their websites. In addition, Section 69A of the IT Act, 2000, lays down the procedure to issue takedown orders. They also stand in opposition to the *Shreya Singhal vs Union of India* (2015) verdict which elucidated the guidelines for blocking content ("Draconian Rules", 2023). As of mid-June 2023, the government fact check unit as conceived in the 2023 amendments had not yet been set up.

In compliance with the IT (Intermediary Guidelines and Digital Media Ethics Code) Rules, 2021, WhatsApp released its user safety report in March 2023. As per the report, over 4.7 million Indian accounts were banned by the platform between March 1 and March 31, 2023, as users violated Indian laws or the app's terms of service. For similar reasons, more than 4.5 million users were banned between January 1 and February 28, 2023. Nearly a quarter of them were "proactively banned by WhatsApp before any complaints were received from users". Complaints and ban appeals for 4,720 accounts were also received by WhatsApp but the platform took action against 553 only. In a statement, while releasing the report, WhatsApp said: "Over the years we have consistently invested in Artificial Intelligence and other state-of-the-art technology, data scientists and experts, and processes,

Stay safe with WhatsApp.
Add an extra layer of security to your WhatsApp account with Two-Step Verification.
Secure your account and protect yourself and your family from scams
whatsapp.com/staysafe.
Two-step verification
Confirm the six digit password
NEXT

**FIGURE 10.1** Photo of a Full-page Newspaper Advertisement by WhatsApp in April 2023.

*Source:* Authors' picture

in order to keep our users safe on our platform". A public service campaign is also being run by WhatsApp as of June 2023, advising users to keep their data safe on WhatsApp through their new features.

## Implications

WhatsApp is important for personal and professional reasons. As more and more people use the payments options, the small business sector may prosper. Since it can be integrated with its parent Meta and siblings Instagram and Facebook, marketing of products or services may become easier in the future. It is also helping the delivery of educational and health services. It has been found to be very valuable for assisting in administration. These trends are likely to continue as currently class and office groups and alumni

**FIGURE 10.2** Screenshot of a Promotion by WhatsApp on Facebook.

*Source:* Authors' screenshot

are largely still on WhatsApp and have yet to migrate to rivals Signal and Telegram.

As detailed in the regulation and fake news chapters, WhatsApp has helped in aiding many types of crimes and conflicts. The application has come of age globally and needs to work with other stakeholders at curbing these

malpractices. If WhatsApp wins the legal battle with the Indian Government regarding not disclosing originators of content and sticking to end-to-end encryption, its user base may grow in future. People may also spend more time on it in future, as it integrates more deeply with business applications. and expands the range of its functionality.

The current user base of WhatsApp in India is huge. The potential to use this app for good or for bad is enormous. All the stakeholders, i.e. the users, the app company and government, need to come together to see that the prosocial uses of WhatsApp are encouraged and antisocial uses reduced and done away with. Hence, holding only the user or the platform liable or relying mainly on media literacy efforts via the technology companies is currently not sufficient. If the government becomes overzealous in its efforts to control content on WhatsApp, it could result in infringement of freedom of speech or invasion of privacy. If the WhatsApp company either shares user data with Facebook, Instagram or other companies as its changed privacy policy announced in 2021 would suggest and/or removes encryption to identify content senders at the behest of government or other commercial entities, it is again an invasion of privacy, and curtailment of freedom of speech ultimately devaluing the app which is partly popular because of the claim of end-to-end encryption.

Finland's approach, often considered to be a model that other countries are trying to emulate, is one of empowering users of social media by government-sponsored media literacy programmes. This approach is different from the media literacy programmes sponsored by the digital technology and media companies themselves. This may be a public service that even a country like India may want to adopt for the future, as these initiatives are vital in protecting freedom of speech in a world awash with misinformation (Mackintosh, 2019).

Since the business model of WhatsApp has been to provide the app free to users, the company is trying to monetise it via business uses, starting payments on it and possibly selling/providing the meta data of WhatsApp users to its other sibling organisations, Facebook and Instagram in the future. As a result of it being freeware, the app has inbuilt features to encourage users to spend more and more time on it, in the process leaving a large digital footprint which the parent company may try to monetise as part of sale of macro trends/metadata. Users who value their privacy may well be willing to go in for a subscription type model of funding where they are willing to pay a small price for the service, rather than have their personal data shared with some other party.

The furore that broke out over WhatsApp's new privacy policy proposed in late 2020 gives some indication that while WhatsApp and its parent company the behemoth Facebook a have a large number of users in India, they may not be able to take them for granted in the years to come. However,

anecdotal evidence suggests that while many users as of May 2021 have installed competitors, social messaging apps Signal and Telegram, they are reluctant to leave WhatsApp since many of their social and work-related groups are active on it.

In a recent development, WhatsApp had filed a legal complaint in the Delhi High Court on May 26, 2021, against the Indian Government, in an attempt to not comply with new information technology intermediary regulations that were coming into force on May 26, 2021, impacting the functioning of various social media such as Facebook, WhatsApp and Twitter in India. WhatsApp's opposition to the new regulations was based on the fact that the new regulations could compel the company to break privacy protections, by breaking-end-to end encryptions and tracing chats, identifying the first originator of chats when the authorities demand it. As the matter is now subjudice, it is unknown how it will pan out. The implications are huge as technology giants Meta and Twitter now called X have invested heavily in India and it is a key growth area for them. Removing end-to-end encryption of messages if required by the Indian Government may mean an end to their product. Users may also feel the heavy hand of the state causing a chilling effect on free speech, as well as an invasion of their privacy in case encryption is removed. The Indian Government's response to WhatsApp's lawsuit challenging the new information technology regulations was that while it was committed to the right to privacy of citizens, it was subject to "reasonable restrictions" and that "no fundamental right was absolute" (Sharma, 2021).

In its petition the WhatsApp company argued that being required to track the originator of a message has no legal sanction. It neither protects persons such as journalists and activists from arbitrary state action nor does it meet the proportionality test based on a 2017 Supreme Court verdict of being the least restrictive infringement of Indian's fundamental right to privacy. The new intermediary guidelines are similar in approach to the "fake news law" introduced in Brazil in 2020. However, the digital future in India may see it positioning itself between a Chinese-style firewall and a Western model of the Internet. WhatsApp's legal challenge will help to determine which end of the spectrum will be India's fate ("WhatsApp Lawsuit", 2021). In February 2023, WhatsApp in the Supreme Court agreed to the undertaking that it would not limit the access of users who had not agreed to its 2021 privacy policy. The company maintained that it would follow this approach till the forthcoming Data Protection Bill came into existence ("Privacy Policy Case", 2023).

According to technology and legal expert Apar Gupta, since allowing traceability of messages as required by the government or of greater sharing of users' data by WhatsApp with Facebook or other entities both could impinge on the privacy of users, other regulatory solutions are required. He espouses a regulatory framework that is deliberated on in the Parliament

and the public domain, which identifies harm and solutions understanding the technical aspects and impacts on privacy (Gupta, 2021).

An expert opinion expressed by three special rapporteurs from the UN to the Indian government on June 11, 2021, claimed that India's new IT rules did not conform with international human rights norms. In their view, they said they had "serious concerns" with aspects of the legislation wherein "due diligence obligations" placed on intermediaries such as Facebook or Twitter may lead to a possible "infringement of a wide range of human rights" (Banerjee, 2021).

As global technology companies such as Google, Meta and Amazon have huge market power, the future tussles between users, governments and the technology giants may end up being skewed in the favour of the companies. If they exercise monopoly power in the face of weak competition, users or even states may find themselves on the backfoot. In the words of Abhinav Prakash Singh:

> Technological disruptions are causing far reaching upheavals in the economy, society and polity. The latest standoff between India and foreign companies over IT regulations is part of a worldwide trend. It is indicative of the growing power of tech companies to defy and undermine State power.
>
> *(Singh, 2021)*

Facebook is the parent company of WhatsApp and given its global digital footprint, it is in the position to wield power. Meta has recently invested in the telecommunications provider Reliance Jio in India. This represents some degree of vertical integration. This bundling may enhance the market power of both Meta and Jio in India in the years to come, leaving the user at the mercy of possible high rates of service in the future.

In India, much will depend on the provisions of the New Digital Personal Data Protection Bill 2020, which is to be tabled in the Indian Parliament in July 2023. This Bill purportedly "provides for the processing of digital personal data in a manner that recognizes both the right of individuals to protect their personal data and the need to process personal data for lawful purposes" (Rajagopal, 2023). So the contours of the struggle for supremacy in the tussle between the user, the platform and the state will really be defined by the aspects of this law.

Globally, the forces of techno-feudalism may be on the rise, along with the power of authoritarian governments in certain countries. The rapid strides in Artificial Intelligence in the last few years coupled with the launch of AI products such as ChatGPT to the general public have emphasised the importance of technology companies and their impact on societies. Regarding social messaging, Meta is currently testing AI-powered tools such as AI-powered chat on WhatsApp and Messenger (Mehta, 2023).

The configuration of power between the state, the digital media company and the user/ citizen may vary from country to country depending on the circumstances. The state may choose to exercise its authority and seek to control Facebook and WhatsApp via legislation. Alternatively, the state may informally collude with the social media companies to further its own interests, for example in attempting to sway public opinion. The way things eventually pan out is unclear at the time of writing this.

## Future Research

As we head into a brave new world, post-Covid-19, some of the changes in the use of digital and social media that accelerated during the Covid-19 period may be here to stay. Increased activities online, be it for work or play can be expected. Some forms of work from home first practised during the pandemic may continue because they are time and/or energy efficient. Mediated relationships, interactions in virtual office groups, friends and family, e-commerce, are all likely to survive and may accelerate in the years to come. A social messaging app such as WhatsApp, if it is not to become anachronistic and fall by the wayside, will have to keep updating and morphing into a creature better able to anticipate and meet users' myriad demands in the future. It will be a reinvent thyself or perish scenario in a dynamic digital environment. WhatsApp has added new features from time to time to keep its users engaged. For example, issuing of new emoticons or sticker packs such as for Father's Day etc., WhatsApp is also encouraging horizontal interaction with other apps, such as connecting to Instagram stories. Meta is already incorporating AI tools and machine learning into some of the WhatsApp functions.

The current study, while it has thrown light on the subject and some important trends have emerged, has just illuminated some part of the vast beast that WhatsApp has grown into. A qualitative study such as this one does have limits in terms of drawing sweeping conclusions or inferences for a vast body of users as in the case of India. Further research into this area could take a much larger sample for study, a comparative approach between countries or between different types of social media, including other social messaging apps could also be employed. With that being said, many of the hunches that first provoked the interest of the researchers have been validated in the course of the current investigation. So, more research is required on macro social trends in the context of WhatsApp.

At the same time more insights are required at the micro-level, some psychological aspects perhaps into why people spend time on WhatsApp, what type of content do they like/ forward and so on. Since WhatsApp works on end-to-end encryption, much of the current research on WhatsApp utilises mixed methods and ethnographic approaches. Such studies would contribute to a better understanding of people's use of WhatsApp in future.

WhatsApp incorporates text, voice and video; it would be interesting to see studies that take up WhatsApp and Indian languages, as well as use of WhatsApp in rural areas. Regulation of new media and more specifically social media and social messaging apps is an area which is under researched in India. It stands at the intersection of technology, law, policy and economics.

Research in many aspects of WhatsApp is cutting edge and may pave the way for understanding the impact of other social media. An interdisciplinary work such as the current one has involved aspects of communications, sociology, psychology, economics, law and technology. It is hoped that the trends uncovered in this research have provided a better insight into the how, why and impact of WhatsApp in India, and by extension other social messaging applications and their usage in other countries as well.

## Note

1 Scenarios are used in forecasting future directions when the degree of uncertainty is high.

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# APPENDIX

## Appendix I: List of Interviews

| *S. No.* | *Name* | *Date* | *Location* |
|---|---|---|---|
| 1. | Ajeet Karn, Owner, News Buzz | 9.11.2017 | Delhi |
| 2. | Vipul Upadhyaya, National Ops Head, Siti Telecom | 17.11.17 | Delhi |
| 3. | Susan Vishwanathan, Professor, Jawaharlal Nehru University | 24.11.2017 | Delhi |
| 4. | Sunil Bajpai, Principal Advisor, Telecom Regulatory Authority of India, TRAI | 8.12.2017 | Delhi |
| 5. | Nikhil Pahwa, Founder, Medianama | 8.12.17 | Delhi |
| 6. | Maitreyi Choudhury, Professor, Jawaharlal Nehru University | 19.12.17 | Delhi |
| 7. | Ankit Lal, Social Media Strategist, Aam Aadmi Party | 20.12.17 | Delhi |
| 8. | Badri Narayan, Member, Railway Board | 20.12.17 | Delhi |
| 9. | Apar Gupta, Lawyer | 3.1.18 | Delhi |
| 10. | Vigneswara Ilavarasan, Professor, Indian Institute of Technology | 10.1.18 | Delhi |
| 11. | Amita (Name changed), senior faculty of a government institute in New Delhi | 10.1.18 | Delhi |
| 12. | Anand (name changed), Senior officer, Ministry of External Affairs | 24.1.2018 | Delhi |
| 13. | Rajesh Kumar, Executive Director, Society for Youth and Masses (SPYM) | 9.2.18 | Delhi |
| 14. | Boys from the Blind School | 14.3.2018 | Delhi |

(*Continued*)

| *S. No.* | *Name* | *Date* | *Location* |
|---|---|---|---|
| 15. | Navin Kumar, Professor, Delhi University | 17.4.18 | Delhi |
| 16. | Samir Kapur, Vice President, Adfactors | 4.5.18 | Delhi |
| 17. | Reshma Dutta, Executive Director, Aadhar | 14.5.18 | Bundu, Jharkhand |
| 18. | Jaishri Jethwaney, Professor, Institute for Studies in Industrial Development | 7.5.18 | Delhi |
| 19. | P.J. Mathew Martin, Associate Professor at Ali Yavar Jung National Institute of Speech and Hearing Disabilities (Divyangjan), AYJNISHD(D) | 5.7.18 | Mumbai |
| 20. | Sohini Guharoy, Social Media Editor, The Quint | 25.7.18 | Noida |
| 21. | Pratima Murthy, Professor, National Institute for Mental Health and Neurosciences | 1.8.18 | Bengaluru |
| 22. | Manoj Sharma, Professor, National Institute for Mental Health and Neurosciences | 3.8.18 | Bengaluru |
| 23. | Prakash (name changed), senior civil servant | 26.8.18 | Delhi |
| 24. | Samuel and Meenu Mani, Founder, Yes We Can | 30.8.18 | Delhi |
| 25. | Toshi, LGBTQI+ activist | 12.3.19 | Delhi |
| 26. | Tanmay (name changed), Senior Civil Servant | 28.6.19 | Delhi |
| 27. | Anubhuti Yadav, Professor, Indian Institute of Mass Communication | 30.6.19 | Delhi |
| 28. | Brig. Tripathi (name changed), Indian Army | 6.1.2020 | Delhi |
| 29. | Dharini Mishra, Special Educator | 7.9.21 | Delhi |
| 30. | Neena Wagh, Autism activist | 15.9.21 | Delhi |
| 31. | Varun Sen Bahl, Lawyer and technology policy consultant | 2.7.2023 | Delhi |

## Appendix II

### WhatsApp Survey 2018

Name/Designation (optional)……Age……Gender….

1. Do you use WhatsApp?
   .....
2. Why do you use WhatsApp?
   ……
   ……
   ……
   ……
   ……
   ……
   ……
   ……
   ……
3. What kind of features do you like on WhatsApp? (text, audio calling, video calling, exchanging photos, videos, audio, individual chat, group chat)
   ……
   ……
   ……
   ……
   ……
   ……
   ……
4. What kind of content do you like on WhatsApp? (news/entertainment/ chatting/ sports/politics/others)
   .....
   .....
   .....
   .....
   .....
5. Have you faced any problems because of using WhatsApp?
   ……
   ……
   ……
   ……
   ……
   ……
   ……

……
……..

6. Do you receive forwarded messages on WhatsApp? Do any of the opinions/forwards on WhatsApp make you change your mind about any issue?
   ……
   ……
   ……
   ……
7. Have you ever received any propaganda/politically motivated messages over WhatsApp? Has it helped change your mind about the issue?
   ……
   ……
   ……
   ……
   ……
   ……
   ……
8. What is a good response to WhatsApp propaganda?
   ……
   ……
   ……
   ……
   ……
   ……
   ……
9. Have you used WhatsApp for business? Or been approached for business through WhatsApp?
   ……
   ……
   ……
   ……
10. How many times a day do you check WhatsApp?
    ……
11. How many hours a day do you spend on WhatsApp?
    .....
12. Rank in order of preference, where 1 is most preferred and 5 is least preferred:
    a) WhatsApp…….
    b) Facebook…….
    c) Instagram…….
    d) Twitter…….
    e) LinkedIn in …….

13. How many messages do you send and receive a day on an average from all contacts
    …….
14. Number of people you interact with regularly on WhatsApp
    ……
15. Rank in order of preference, where 1 is most preferred and 5 is least preferred:
    a) Mobile phones…….
    b) Cheap transport……
    c) Affordable food……..
    d) Clean air…….
    e) Clean water
16. Which is your most-used smiley/emoji on WhatsApp? Which one would you like to see added in the emoji collection of WhatsApp?
    ……..…
    ……..
    ……
17. If you had to describe WhatsApp in one phrase/sentence, how would you describe it?
    ……
    ……
    ……
    ……
18. Are you using WhatsApp for professional work? If yes, how has your experience been?
    ……
    ……
    ……
    ……
19. Life before WhatsApp was better for professional work or is it better with WhatsApp?
    ……
    ……
    ……
    ……
20. Has WhatsApp brought your family/extended family closer or do you feel it has caused more miscommunication and rifts?
    ……
    ……
    ……
    ……

# INDEX


Aadhar 147, 160, 190, 227–228, 274
Aam Aadmi Party 93, 95, 259, 273
accessibility 124, 180–183, 196, 199, 207, 220
accessible 127, 180–181, 201
active users 3–4, 6–7, 9, 69, 226, 240, 251
addiction 45–46, 49, 51, 53, 56–57, 61–62, 65, 67, 258
adultery 148, 258
advertising 16, 92, 117–118, 165, 170, 222, 228, 236–238
affordable 31, 65, 71, 77, 81, 90, 257, 277
affordable mobile data 31, 90
aggression 11, 41, 51, 55, 61, 256
Alipay 241
all-in-one app 240
amendments 165–169, 173, 262
anecdotal conversations 220
anecdotes 218
anger 89, 116, 135
anonymity 38, 41, 47, 52, 100, 142, 151, 235, 256
anti social 153, 255, 265
anxiety spiral 48, 62
Appadurai, A. 252
application 2, 3, 5, 7, 12, 35, 49, 82, 132, 146, 158, 163, 168, 182, 189–190, 193, 204, 251, 264
approach 8, 10, 16, 27, 96, 103, 116, 129, 133, 138, 167, 179, 190, 199, 207, 245, 255, 265–268
armed forces 14–17, 62–63, 79–80, 82–83, 91, 109–110, 122, 128, 132–134, 141, 152, 168, 220, 257, 260
artificial intelligence 19, 49, 102, 127, 233, 250, 262, 267
assault 156
attraction 41–42, 51, 61, 173, 256
audio format 178
authentic usage statistics 238
authenticity 124, 131–132, 134, 136, 142, 222
autism 197–198, 274

backup 148, 209
bandwidth 60
barriers 5, 13, 25, 31, 117, 124, 178–179, 181, 251, 254
behaviour 29, 33, 36–38, 41, 43–44, 46–47, 51, 55, 92, 118, 125, 127, 171, 189, 221, 224, 245–246, 258
Bharatiya Janata Party 39, 40, 93
biases 39, 106, 118, 135, 222
Blackberry Messenger 3, 221
blind 57, 116, 193, 273
blue tick 12, 24
Bollywood 146, 148, 245
BookMyShow 233, 245, 249
brand management 76, 238
British Broadcasting Corporation (BBC) 89, 91, 112, 117, 119, 122–123, 143–144
Broadband 11, 206, 211

Broadcast Audience Research Council 148
broadcast feature 10, 97, 102, 221, 236
bulk 98, 136, 181, 221, 236
bureaucrat 205
business version 234

Cambridge Analytica 29, 93, 100, 147, 182
Castell, M. 254
categorisation 131, 142
censorship 105, 164, 166, 167, 218, 262
Central Bureau of Investigation 156
centrality 27, 258
Centre for Policy Research 101
Chat GPT 127
chat messages 150
chatbot 10
chatting 52, 55–56, 59, 61, 69–71, 78, 81, 85, 98, 132, 186, 256, 275
cheating 150–151
child pornography 146, 147, 154, 156
China 4–6, 22, 70, 128, 131, 146, 164, 172, 175, 207, 218, 220, 226, 240–241, 249, 251
Chinese-made phones 220
Chomsky, N. 118
circulation 11, 114, 118, 123, 139, 142, 143, 155–156, 170, 173–176, 235
Cleartrip 233
clutter 236, 239, 243
cognitive dissonance 41, 57
common man 51, 256
community 11, 26, 33, 36, 51, 85, 86, 106, 115, 132, 189–193, 231, 242, 255
confidence 13, 32, 97, 125, 126, 194
Confirmed Accounts 233
conformity 12, 29, 33, 118
connectivity 4, 6, 7, 25, 28, 31, 76, 84, 181–182, 221, 251
consent 84, 86, 106, 108, 159, 161
constant expectation 257
consumption 19, 31, 34, 49, 52, 61, 92, 127, 246
content creation 17, 99, 101, 110, 127
content moderators 147, 172
controversy 102, 119, 148, 209
convenience sample 204
copyright 149, 163, 175
Corporate Social Responsibility 77
cost-effective 12, 32, 81
credibility 38, 115, 123, 124, 130, 135, 141, 144, 221, 256
credible source 133, 139, 141, 260
crimes 18, 115, 149–152, 156, 164, 168, 261, 264
criminal 119, 124, 150, 155, 158, 164, 176, 183, 235, 249
Criminal Procedure Code 164
crisis Management 239, 243, 260
critical 35, 49, 112–113, 126–127, 140, 150, 168, 183
customer support 143
cyber criminals 158, 176
cyber law 149
cyberbullying 41, 61

Dalit 153
dark web 154
data harvesting 10
data-light 9, 13
data plans 6, 254
data sharing 147, 161, 209
database 161, 235, 239, 243
data-sharing 147, 170, 176
Deaf Community 189–193
debunk 102, 124, 152
defamation 162, 163
Delhi High Court 149, 159, 163, 167, 174, 226, 266
Delhi police 148
democracy 12, 33–35, 57, 58, 140, 144, 165, 172, 270
Department of Telecommunications 165
dependence 45, 90, 257
dialogic communication 199
diffusion 10, 21, 22, 117, 253, 254, 271
diffusion of innovations 10, 21, 22, 271
digital divide 11, 13, 30, 181, 201
digital journalism 106, 125, 142, 248
digital literacy 58, 124, 126, 144
Digital Media Ethics Code 20, 165–166, 173, 262, 269
digital networks 28
digitalisation 2
directly filtered 98
disabled-friendly 180
disappearing messages 108, 121
discrimination 50, 180, 181
disinformation 21, 31, 58, 113, 117, 118, 126
display picture 24, 45, 51, 74, 84, 121, 255, 256, 258
dissolution 159
Do Not Disturb registry 142
Doordarshan 35
Doron, A. 25, 214

echo chamber 31, 39, 118
Education and health indicators 151
electronic evidence 165, 166
elite interviews 13, 14, 16, 18
encounter 152, 184
encryption 3, 13, 18, 48, 93, 106, 115, 135, 147, 149, 160, 163, 168–170, 176, 203–204, 219, 261, 265–266
end user 168, 169, 261
end-to-end encryption 18, 48, 93, 106, 135, 147, 160, 163, 168, 176, 204, 211, 261, 265–266, 268
engagement 5, 10, 20, 92, 95, 226, 238, 246, 247
equal treatment 19, 91
exam time 186
exchanging information 82, 199, 220, 257
expense tracking 240

face to face 16, 80, 204
fact-checkers 122, 130, 141
fact checking unit 140
fake messages 115, 121–123
false information 100, 114, 123, 152, 166, 173, 262
false news 18, 163
farmers protest 153
fatigue 202, 220, 245
fear of missing out(FOMO) 69, 241
Festinger, L. 41
financial crime 156
first-mover advantage 98
Focus Group discussion 185
followers 95, 100, 101, 111, 240
footage 55, 154
forwarded many times 108, 120, 121, 170
forwarded messages 1, 2, 17, 69, 78, 81–83, 101, 106, 108–110, 115, 120, 128–129, 131–141, 168, 187, 209, 257, 260, 276
fraud 147, 148, 158, 238
free access 91
Free Basics 4, 91
freedom of speech 146, 162, 164, 165, 171, 256
freeware 3, 254, 265
frequency 52, 56, 78
fundamental right 147, 161, 164, 266

Gender Ratio 15, 63, 70, 79
global outage 7
Global South 4, 20, 91, 113, 251
glocalisation 252, 270
Goffman, E. 37
Good Morning messages 17, 35, 60, 78, 254, 258
governance 124, 180, 200, 203, 241
gratifications 11, 22, 27, 50, 58, 117, 225
greater impact 13, 91
grievance 108, 124, 165, 166, 181, 220, 261
group communication 25, 109, 220
group dynamics 24, 38, 51, 255
group identity 39

harassment 11, 42, 54, 86, 101, 146, 151, 256
Haryana 150, 196
heavy user 68
Herman, E.S. 118
hierarchy 37, 56, 214, 215, 257
human behaviour 36, 38, 125
human psychology 132
human rights 178–180, 267, 269

ideation 96
identity formation 11, 57
identity theft 67, 146, 158
imagination 19, 47, 94, 142, 187
imagined communities 11, 20, 26–27, 36, 50, 57, 204, 223, 255, 269
inappropriate messages 65, 220
inclusion 31, 179, 180, 182
incumbent 102
in-depth interviews 185
Indian Constitution 147, 159, 162, 166, 167, 171
Indian Copyright Act 163
Indian Evidence Act 165
Indian Institute of Technology 40, 207, 273
Indian Medical Association 120
Indian National Congress 93, 95, 106
Indian Telegraph Act 159, 164, 165
Indian terrain 25
inexpensive 82, 258
influence 5, 17, 32, 37, 40, 61, 90–91, 116–117, 176, 247
influencers 7, 100, 121, 239, 240, 247
infodemic 118, 143
Information and Communication Technologies 180
information disorder 117, 125, 145
information exchange 182, 198
information overload 123

infringement 163, 167, 265–267
innovation 10, 21, 22, 117, 130, 253, 271
innovative 18, 138, 207, 231
insistence 259
insomnia 48, 67, 203
instant chat 209
instant messaging 3, 25, 45, 97, 113, 189, 223, 240, 252
instant messaging service 3
interactive 2, 12, 27, 234, 236, 244, 270
interactivity 182
intergenerational family groups 38, 50, 255
internal communication 18, 94, 206, 220
internet fasting 56
intersection 125, 182, 269
invented communities 50, 255

Jammu and Kashmir 14, 17, 63, 108, 110, 128, 131, 141, 152, 163, 175, 260
Jeffrey, R. 25, 214
Jharkhand 6, 151, 175, 227, 246, 247
job-related information 198

Karaponas, E. 252
Karnataka 97, 100, 101, 112, 113, 116, 222
keypad 178
Kisan Ekta Manch 153
Kotler, P. 225, 249

Ladakh 14, 16, 63–64, 70, 83–84, 108, 110, 128, 131, 140–141, 258, 260
law enforcement 108, 148, 155, 160, 170
legacy content 102
legal framework 164, 168
Legislative Assembly elections 94, 104
leisure time 203, 254, 258
less-educated 116
linguistic 90, 104
LinkedIn 2, 5, 70, 77, 81, 257, 276
London School of Economics 127, 140, 147, 168
long messages 105, 112
low quality 160
lurkers 234
luxury goods 243
lynchings 18, 115, 116, 139, 145, 152, 175, 261

Maharashtra police 148
mainstream media 31, 35, 90, 100, 101, 123, 126
Make My Trip 233
malinformation 117
manipulation 111, 124, 166
marginalization 11, 92, 118
Maslow, A. 37
Maya Sphere 3
McLuhan, M. 22, 24, 27, 37, 58
mechanism 92, 105, 118, 144, 156, 160
media-sharing features 82, 257
mediated interactions 221, 258
mediated universe 250
medical perspective 178
medical procedures 183
meity 166, 173, 193, 262, 270
memes 40, 78, 89, 93, 100, 120
men-only group 218
meta data 29, 147, 265
micro communities 252
Microsoft 28, 167
micro-targeting 29, 106, 233
mid-career working journalists 81
minority 35, 86, 180, 181
minors 154
misleading content 140
misleading news 119
mobile data 31, 82, 90, 185
mobilisation 39, 116, 151–153, 175
mobilization 21, 143
monitoring 137, 165, 172, 181, 234
monthly actives 240
murder 154
Musk, E. 7
Muslim Marriage Act 159

Narayan, S. 253
Narayanan, S. 253
narcissism 11, 44, 45, 54, 57, 62
narcissistic tendencies 25, 45, 51, 256
narrow-casting 17
national interest 171, 172
National Payments Council of India 241
national security 18, 20, 159, 163, 170–171, 218, 251
nation-building 123
necessity 2, 65, 172, 217, 258
net neutrality 91, 112, 113, 160, 176
Netflix 149
non-governmental organisation 185, 206
non-governmental sector 16

objective content 132
one-on-one communication 38
online company 233
online gaming 160, 173, 262
oversubscribed 217

Pahwa, N. 5, 8, 140, 226, 259, 260
paradigm 25
parallel world 3
participation 25, 28, 91, 179–182, 200
Paytm 158, 176, 225, 227
Pegasus 147, 149, 161, 173, 175
personal chatting 5
personal connect 99
Personal Data Protection Bill 167, 226, 267, 270
polarisation 17, 39, 40, 51, 107, 124, 256
political beliefs 34
political communication 16, 17, 41, 105, 109, 259
political content 107, 259
political economy 10, 27, 28, 112, 144
political messaging 12, 34, 35, 101, 106, 187
popular culture 2, 215
pornographic 46–48, 51, 67, 155, 218
pornography 36, 48, 146, 147, 154, 156, 175, 261
positive, messaging 258
positivity 184
poverty 13, 151, 180
power struggles 127
pre-censorship 105
Prepaid 185
primary research 92, 183
privacy policy 7, 8, 20, 21, 23, 161, 165–167, 170–171, 173–174, 176, 226, 248, 259, 265–266, 269
privacy terms 226
privilege 25, 164
problematic content 108, 122, 157, 261
profile picture 12, 37, 42, 67, 237
psycho-social 16
public domain 118, 160, 209, 267
public imagination 19, 94
public outrage 155
public sphere 34, 51, 52, 256
Punjab 98, 104

QR code 233, 234

Rajput, Sushant Singh 148
ranking 65, 71, 77, 175, 257
rape victim 155
reaction 7, 69, 89, 104, 208, 236
reality creation devices 127
regulators 157, 164, 168, 172, 255
reportage 155, 170
Resident Welfare Associations 153
retail chain 253
retention 9, 110
Reuters Institute for the Study of Journalism 90, 111, 112
rioting 139
Robertson, R. 252
robust editorial system 124
Rogers, E. 253

Samajwadi Party 93
scams 121
secondary data 13, 14, 16, 92, 150, 185, 204, 227, 253
secure videocalls 9
self-esteem 37, 49, 50, 52, 53, 132, 256
self-expression 11, 70
semiotic 60
sensitive in formation 157
sentiment 231
service delivery 180, 183, 184
serviceprovider
sexual content 36, 55, 56
sexual predators 154
sign videos 189, 193
signed videos 192
single-gender groups 218, 220, 221, 259
skype 190
smiley 69, 72, 74, 79, 81, 84, 192, 277
social, factors 179
social distancing 2, 118
social interactions 9, 32, 44, 51, 77
Social Media Manager 94
social model 178, 179
social pressure 12, 258
social security 181, 200
socialisation 32, 38, 51, 255, 257, 261
Society for Promotion of Youth and Masses 206
soft targets 116
source of news 18, 64, 90, 91, 95, 197, 198, 232, 239, 259, 266
speech-impaired 189
spyware 124, 132, 140, 168, 264, 265
stakeholders 13
stalkers 67, 84, 255, 258
superstitious messaging 187
surveillance capitalism 10, 23, 28, 59

survey questionnaire 63
susceptibility 118, 125, 126, 140, 145

Tactical Tech 91
Tamil Nadu 104, 184
targeted 90, 95, 102, 109, 154, 158, 161, 170, 218, 226, 260
technological determinism 10, 27
technoself 58
teenager 154
Telecom Regulatory Authority of India 91, 164, 273
Telegram 2, 4–5, 7, 24–25, 89, 102, 148, 152, 161, 168, 217, 226, 243, 251, 264, 266
terrorism 119, 122, 142, 147
texting 9, 52, 55, 72, 74, 169, 192, 218
Tiktok 6
time-spend 12, 17
tipline 112
tip-offs 78
transcript 101, 105, 160
Trinamool Congress 102, 107
Truecaller 6
Twitter (now known as 'X') 2, 5, 14, 18, 30, 34, 41, 44, 70, 77, 81, 93–97, 99, 105, 110, 124, 126, 139, 152, 153, 182, 186, 228, 238, 246, 250, 257, 266, 267, 276

underprivileged 38, 43, 185
Unicode 182
urban 5, 10, 13, 15, 24, 34, 51, 53, 70, 84, 102, 153, 250, 253
urban and rural gaps 6
urban versus rural 13

verification 105, 122, 123, 125, 135, 138, 241
victim 6, 55, 86, 154, 158, 254
video call 5, 72, 81, 159, 190, 194, 217
video clips 155, 237
videoquality 99, 110, 260
vigilance 132, 150
violation 3, 182
violence 116, 129, 130, 143, 149, 152–154, 156, 173, 175
viral 74, 94, 106, 107, 114, 115, 126, 155, 170, 193
virtual 39, 99, 108, 172, 203
voice note 178, 183, 185, 188
Voice Over Internet Protocol 4, 159
voice recognition technology 233
voice-to-text messages 182
volunteers 76, 95, 96, 100, 104, 193–195

WhatsApp Business Platform 234, 246
WhatsApp elections 17, 106, 109
WhatsApp Payments 226, 227, 243, 259
Wireless Telegraphy Act 164, 165
women-only groups 218
work–life balance 218
work-related office orders 258
World Bank 178, 201
World Health Organisation 119

Yahoo 3
youngsters 61, 64, 67, 71, 91, 107, 206, 235, 243

Zero Inbox Syndrome 51, 68, 83, 258
Zomato 167
Zoom 1, 167
Zuckerberg, M. 8, 9, 23, 29, 147, 173, 240, 249